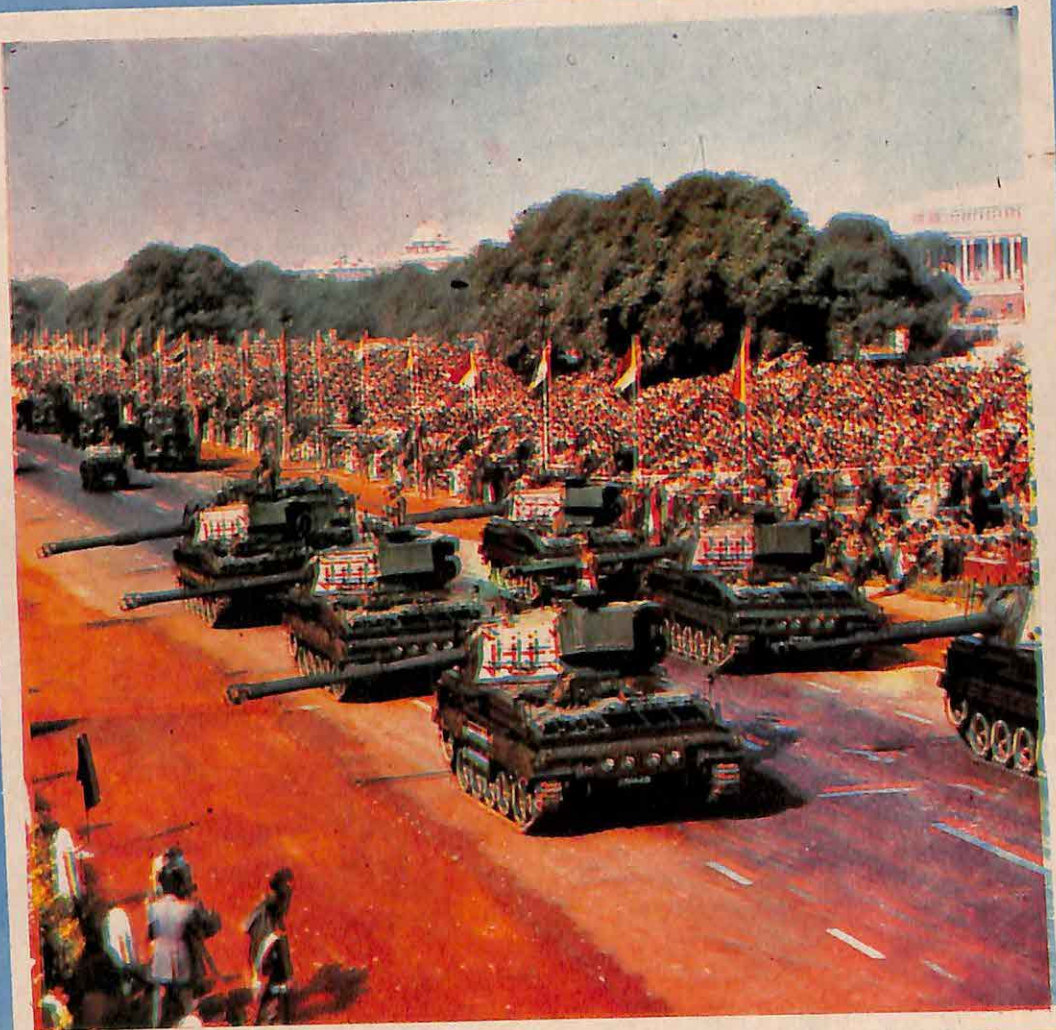


OVR ENVIRONMENT

2



PITAMBAR PUBLISHING COMPANY

A book on Environmental studies based on N.C.E.R.T. Syllabus.

OUR ENVIRONMENT

BOOK II

For Class II

By

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P R E F A C E

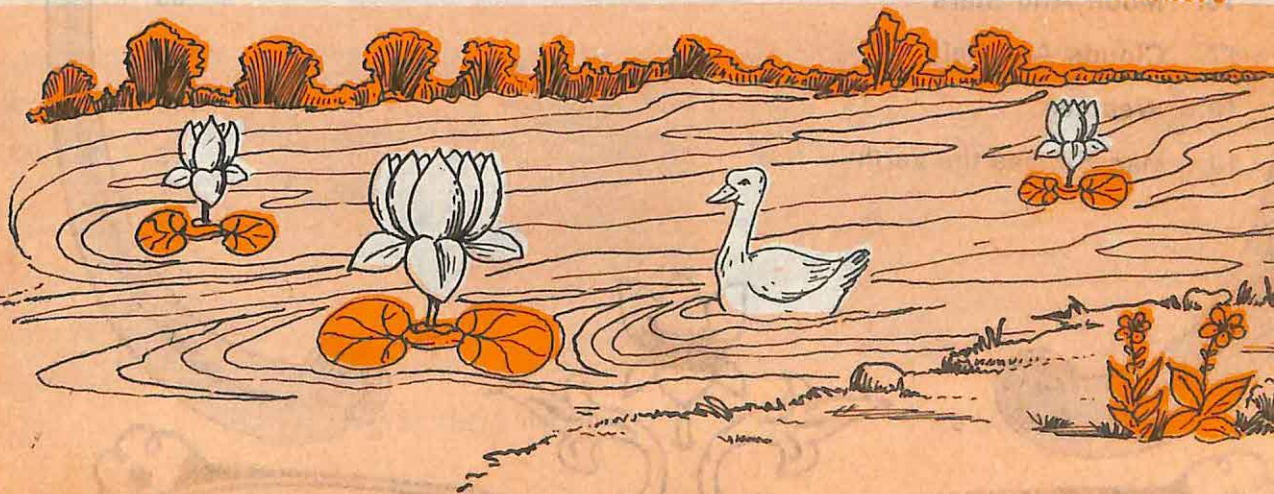
The contents of the present series of **OUR ENVIRONMENT** are based on the syllabus recommended by the National Council of Educational Research and Training, New Delhi. In our present modern world, the importance of environmental studies cannot be overemphasized. By combining the Social Studies, Nature Studies and Health Education, it has been possible to deal with many subjects in a comprehensive manner by presenting all aspects at one place.

As the child grows up, his environment widens and the number of things he is called upon to know and to do, become greater. The better he understands and appreciates his place in society and his relations with those with whom he lives, the fuller will be his involvement and the greater his dedication to the values for which the society stands. This will go a long way to help them become responsible citizens of their neighbourhood, of the state, and of the country.

The books of the present series have been designed to serve as text-cum-work-books. Subject matter is presented in a simple and lucid manner and it has been profusely illustrated with diagrams so essential to the learning of children. The exercises that follow each lesson are intended to impress upon the pupils the meaning and association which the lessons are meant to give with the help of the teacher. The authors shall feel amply rewarded if this series meets the requirements of all-important environment study.

Suggestions for improvement of this book would be gratefully accepted.

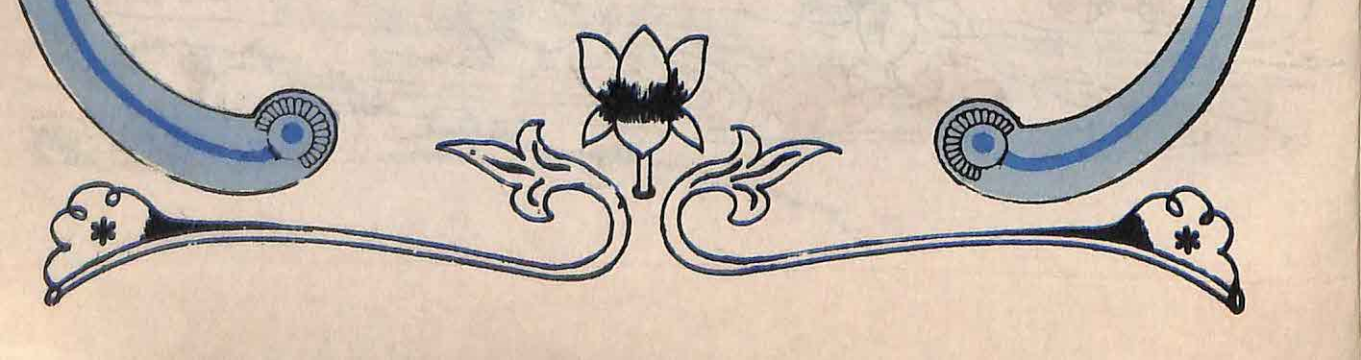
—Authors





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CHAPTER 1

RECREATION IN FAMILY

1. You Need Recreation

You work hard at home.

You work hard at school.

Work alone makes you feel dull.

Then you need to do something that will cheer you.

This is called recreation.

Parents know this.

They take you to parks, gardens, fairs, dramas, circus, etc., for recreation.

Recreation makes you fresh.

2. Visit to Parks and Gardens

Going to parks and gardens is a good recreation.

It is good for health also. Because, there is fresh air in parks and gardens.



Walking in the garden



At the park

Usually, we go to the parks and gardens in the neighbourhood.

A walk in the garden is very refreshing.
Parks have many good games for children

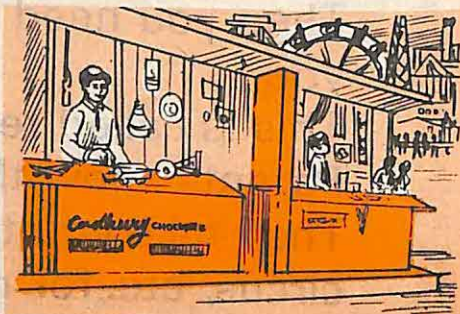
3. Visit to Fairs

A fair offers much fun.

There is decorative lighting all over.

There are a number of stalls.
Some sell toys and trinkets.
Some sell sweets and other eatables.

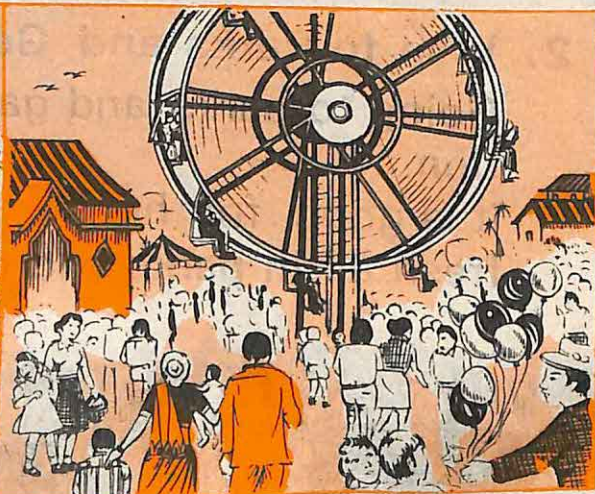
There is the merry-go-round.
There is the giant wheel ride.



Stalls in the fair



The Merry-go-round

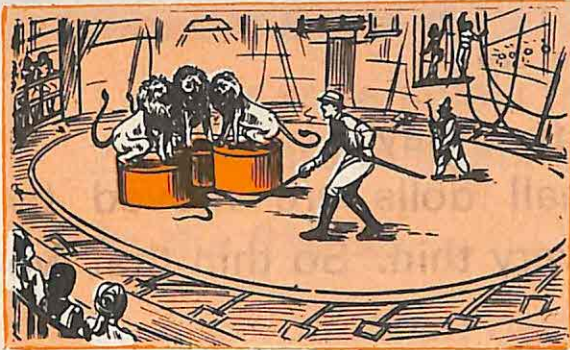


The Giant wheel ride

4. Visit to circus

A circus show is highly enjoyable.
Animals perform surprising acts.

There are feats of horse-riding.
And, of cycle and motor-cycle riding.
Acrobats walk on ropes.
Clowns make us laugh with their antics.



Scenes at a circus

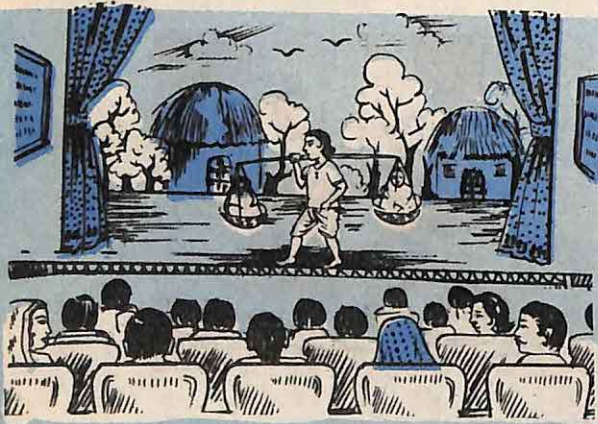
5. Other Recreations

Sometimes your parents take you to the zoo
Here, you enjoy watching various animals.
Actions of some animals are very interesting.
Dramas and puppet shows are also good
recreations



At the Zoo

In a drama, human actors play.
In a puppet show, small dolls are moved by wires. The wires are very thin. So thin that we do not see them.



A scene in a drama



A scene in a puppet show

Things to Remember

1. After long work, we need recreation.
2. For recreation we go to fairs, circus, zoo, dramas, and puppet shows.

Things to Do

1. Make a drawing of a fair.
2. Make a drawing of an animal performing in a circus.

Things to Find Out

1. How are animals trained in a circus ?
2. How are puppets moved ?

Fill in the Blanks

1. There is much decorative lighting in a
2. Animals perform in a
3. There are many strange animals in a
4. In a show dolls are moved by wires.
5. After long work, we need

[Choose from these words: zoo, fair, puppet, recreation, drama, circus.]



CHAPTER 2

DOMESTIC ANIMALS AND PETS

1. Domestic Animals

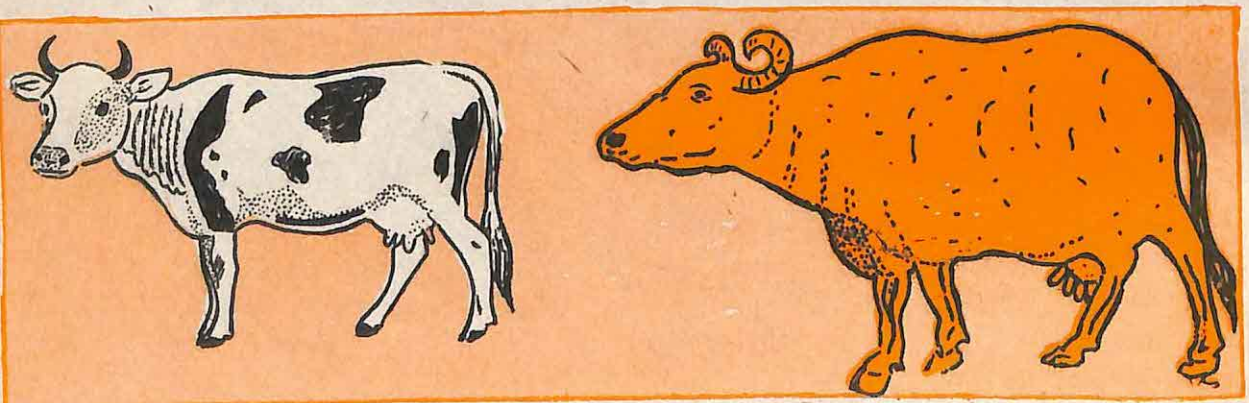
Man keeps many kinds of animals at home.
He gives them food and shelter.
He protects them from their enemies.
He looks after them when they are sick.
All this he does because the animals are useful to him.

Such animals are called domestic animals.

Some domestic animals are cow, buffalo, goat, sheep, pig, camel, ox, and donkey

2. Domestic Animals That Give Things for Food

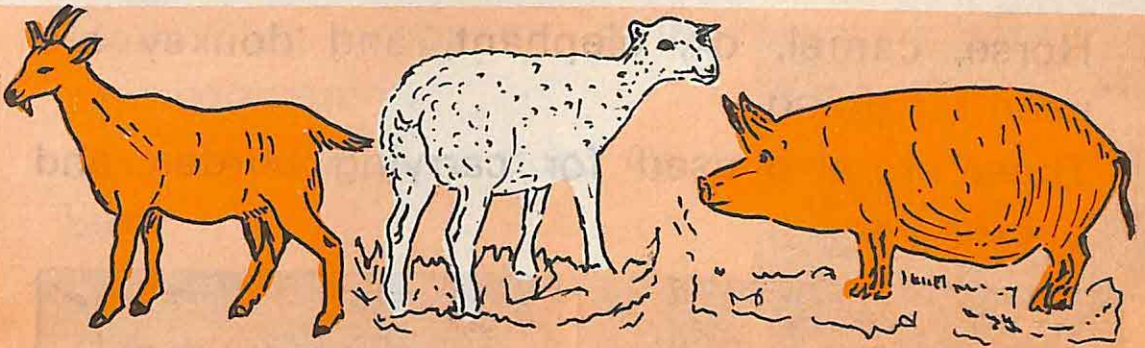
Cow, buffalo, and goat give us milk.
From milk we prepare curd, butter, cream, paneer, and many other things.



The cow

The buffalo

The goat, sheep, and pig give us meat.

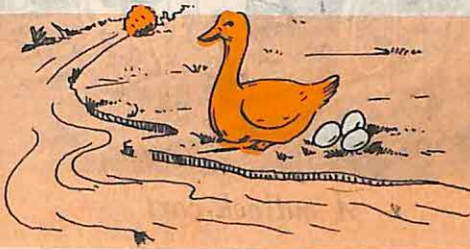


Goat

Sheep

Pig

Hen and duck give us both eggs and chicken.



Duck



Hen

3. Domestic Animals That Give Wool

The hair of sheep, goats, and camels is called wool.

It is cut off with large scissors or shears.

It is then spun into thread.

The thread is worked to make woollen cloth.

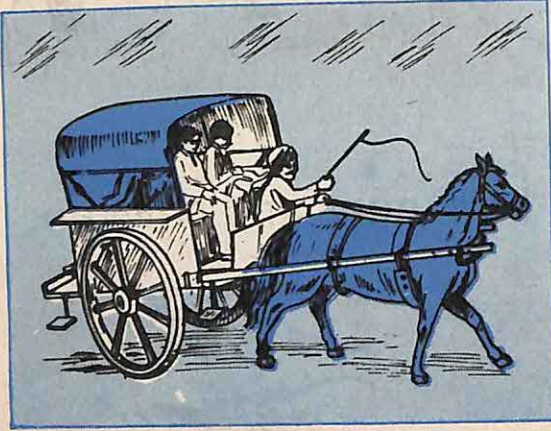


Shearing sheep for wool

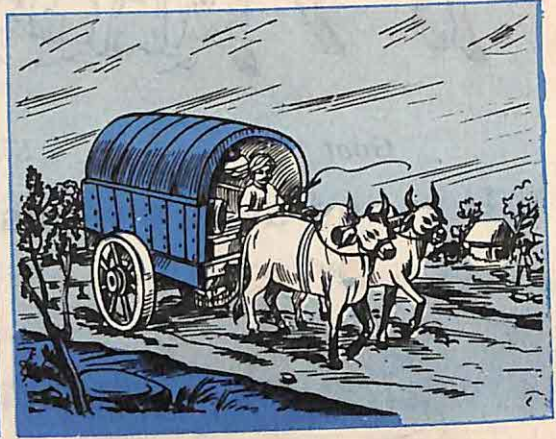
4. Domestic Animals that Work for Man

Horse, camel, ox, elephant, and donkey are used for riding.

These are also used for carrying burden and passengers.



A tonga

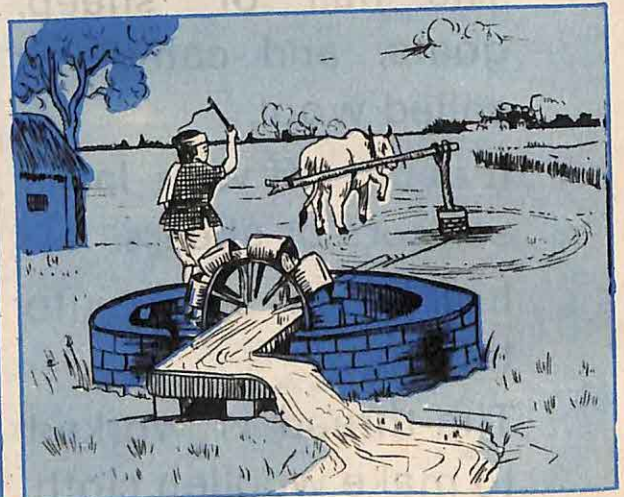


A bullock-cart

Ox, buffalo, horse, and camel plough the fields. They also draw water from wells.



Oxen ploughing the field



Ox drawing water

5. Pets

Man often keeps an animal as a companion.

Such as a cat or a dog. Or, a bird.

Pets are treated with affection.

The dogs and cats are very playful.



Dogs in play

These animals are useful in other ways also.

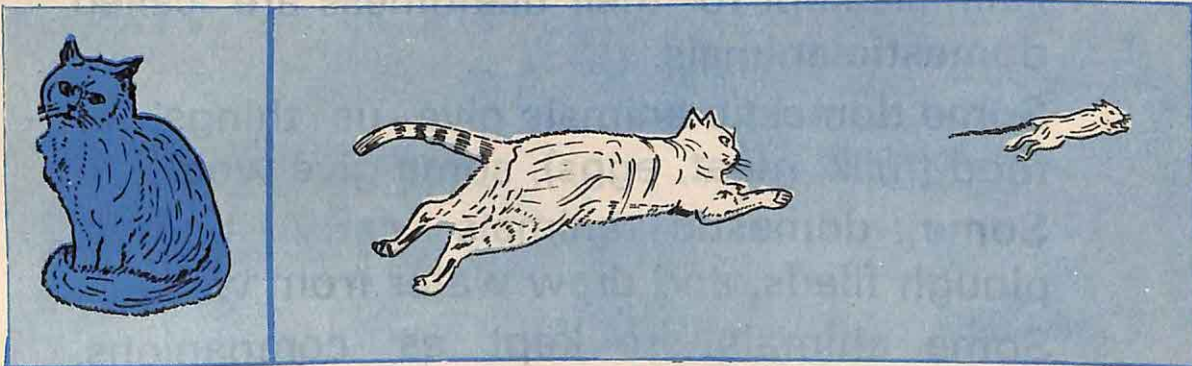
The dog guards the house and fields.

It is very faithful to its master and his family.

A cat keeps away the mice.



Dog guarding the house



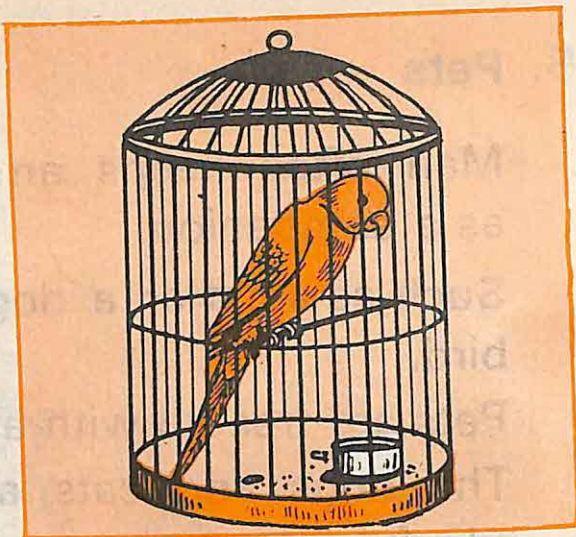
A cat

Cat chasing the mouse

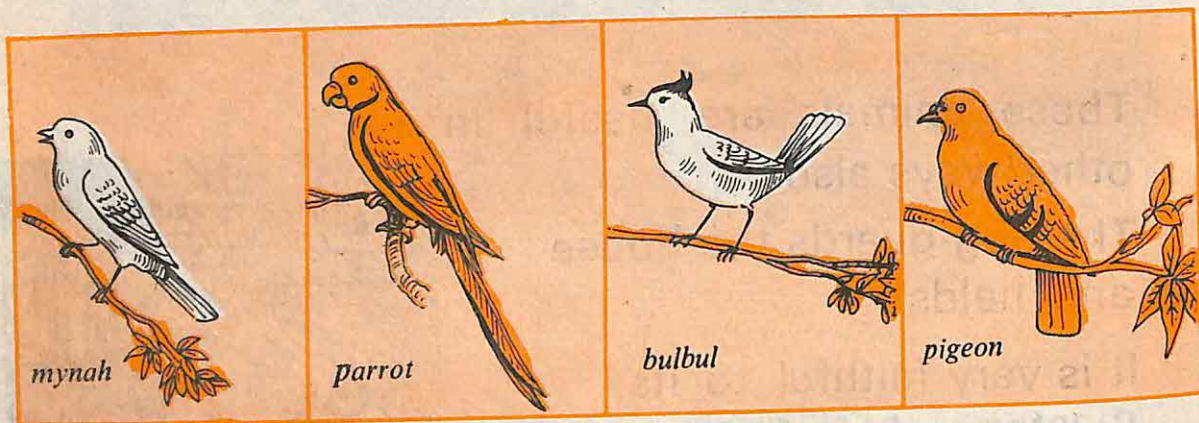
Pet birds are very beautiful.

Some pet birds sing sweet songs.

Some common pet birds are parrot, mynah, bulbul, pigeon, and partridge.



A pet bird in cage



Some common pet birds

Things to Remember

1. Animals kept for their usefulness are called domestic animals.
2. Some domestic animals give us things for food (milk, meat, eggs), some give wool.
3. Some domestic animals carry burden, plough fields, and draw water from wells.
4. Some animals are kept as companions. These are called pets.

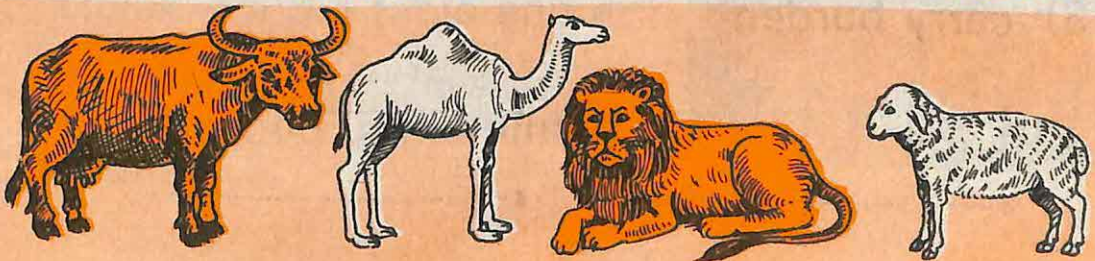
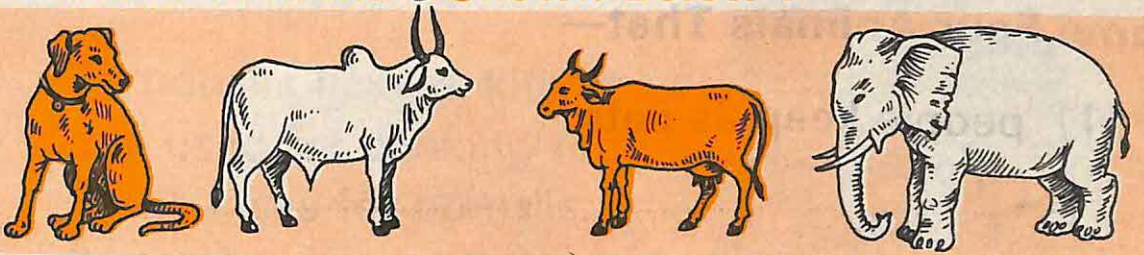
Things to Do

1. Paste pictures of domestic animals and pets in your scrap book.
2. Visit a place where sheep are shorn of their woolly covering.

Things to Find Out

1. How are the different domestic animals useful to a farmer ?
2. How are live fish kept at home ?

Name the Animals Shown Below :



Match the Animal and its Use

Animal	Use
Sheep	Gives eggs
Hen	Guards house
Bulbul	Carries burden
Horse	Gives milk
Ox	Gives wool
Cow	Ploughs farm
Dog	Is a pet
Cat	Sings in garden

Name Four Animals That—

(1) people keep as pets

- 1.....
- 2.....
- 3.....
- 4.....

(2) give things for food

- 1.....
- 2.....
- 3.....
- 4.....

(3) carry burden

- 1.....
- 2.....
- 3.....
- 4.....

CHAPTER 3

PARTS OF A HOUSE

1. Many Types of Rooms

A big house has many rooms.
All the rooms are not alike.
Some rooms are small, some
are big.

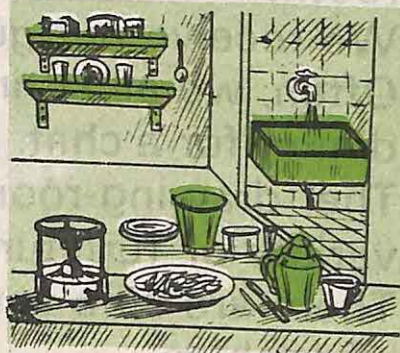


A big house

Different rooms have different uses.

2. The Kitchen

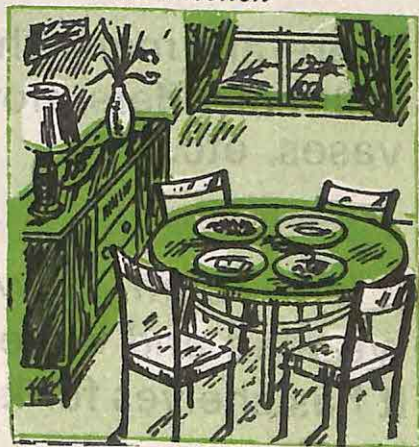
All houses have a kitchen.
It is used for cooking food.
It has racks for utensils.
It may have a water tap also.



The kitchen

3. The Dining Room

Joined to the kitchen is the
dining room.
There is a big table and a
set of chairs in it.
We eat food in the dining
room.



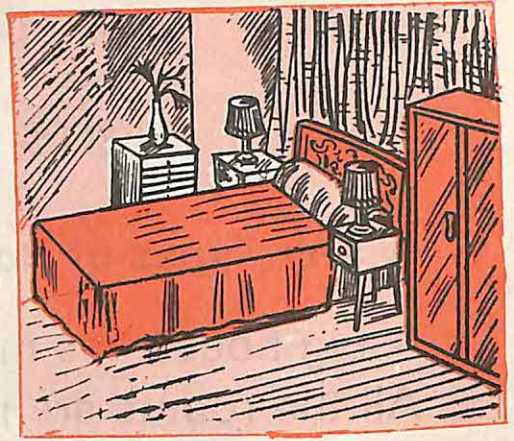
The dining-room

4. The Bed-room

The bed-room is a big room to sleep in.

It has several beds.

Big houses may have two or three bed-rooms.



The bed-room

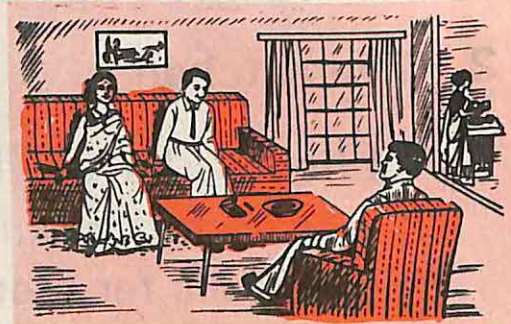
5. The Drawing Room

The drawing room is a big room.

We receive our guests in it. Often, we all sit in it after dinner for a chat.

The drawing-room has a variety of furniture.

There are sofa-sets, divans, and tables.



The drawing room

There are many things of decoration: paintings, wall-calenders, flower vases, etc.

6. The Study

It is a room in which we read and write.

It has shelves for keeping books.

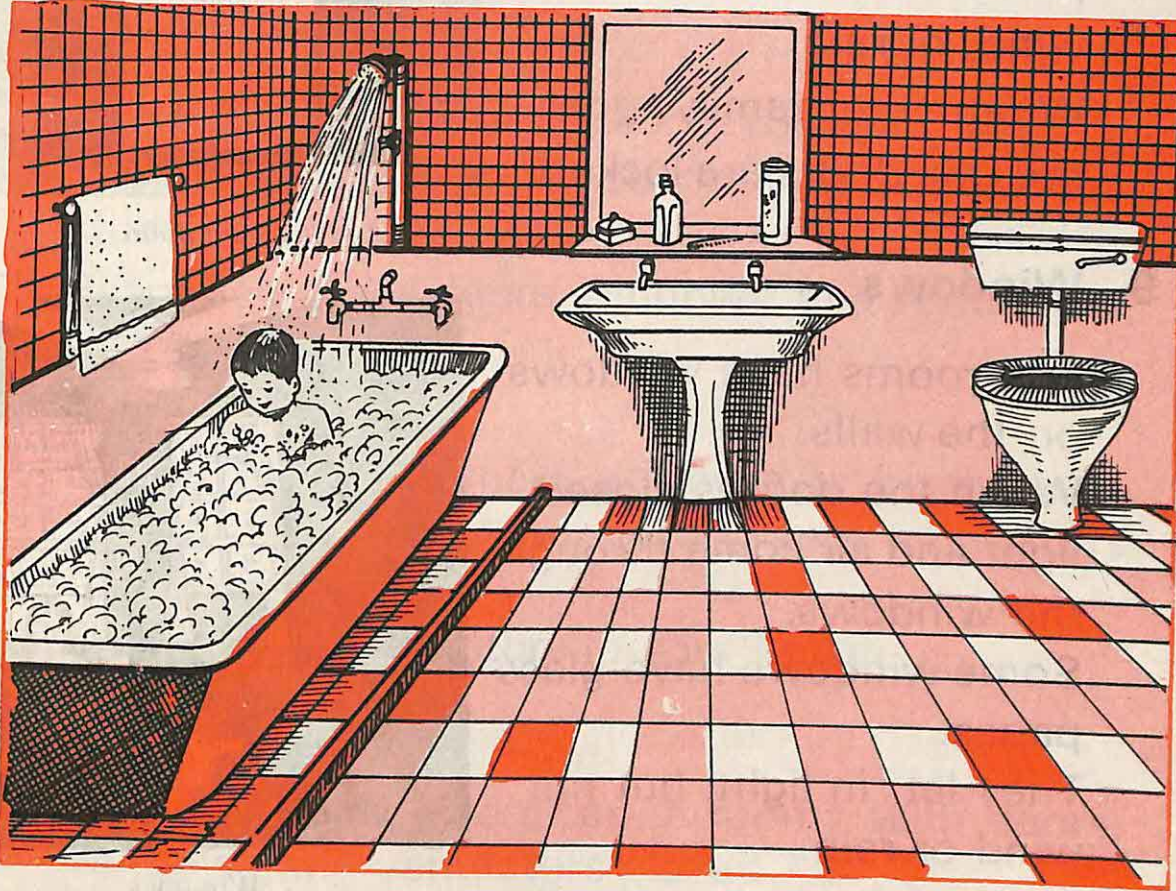
It has a table and a few chairs.



The study

7. The Bathroom

We take bath in the bathroom.
There is a large tub in it.



The bathroom

Or, some other large container for water.
We also wash clothes in the bathroom.

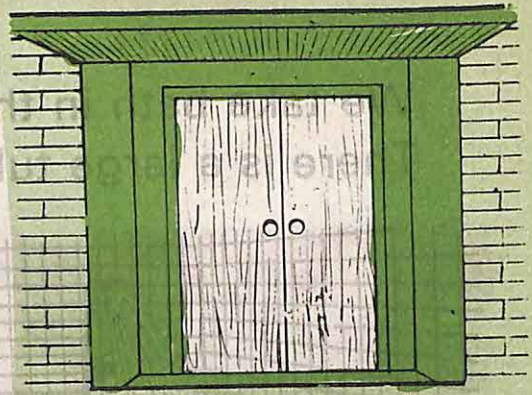
8. Doors

Every house has doors.
We enter or leave the house by its main door.

Every room in the house has a door.

The doors are closed for protection from sun, wind, or rain.

When the family goes out, the doors are locked.



The main door

9. Windows

The rooms have windows on the walls.

When the door is closed, light and air come through the windows.

Some windows have glass panes.

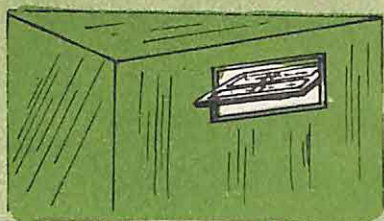
They let in light, but not wind or rain.



Windows

10. Ventilators

Big rooms have small windows near the ceiling also.



Ventilator

Fresh air enters the room through the door. Or, through the windows.

Foul air goes out through the ventilators.

Things to Remember

1. A house has many types of rooms. These are kitchen, dining room, bed-room, drawing room, study, and bathroom.
2. Every house has doors, windows, and ventilators.

Things to Do

1. Go to a place where a house is being built. Watch the doors, windows, and ventilators being fixed.
2. Make a list of furniture in your house.

Things to Find Out

1. Why is it harmful to sleep in rooms with doors, windows, and ventilators closed ?
2. How you can polish furniture at home ?

Fill in the Blanks

1. We sleep in the
2. We receive guests in the
3. We eat together in the
4. Food is cooked in the

[Choose words from these : drawing room, kitchen, bed room, dining room]

CHAPTER 4

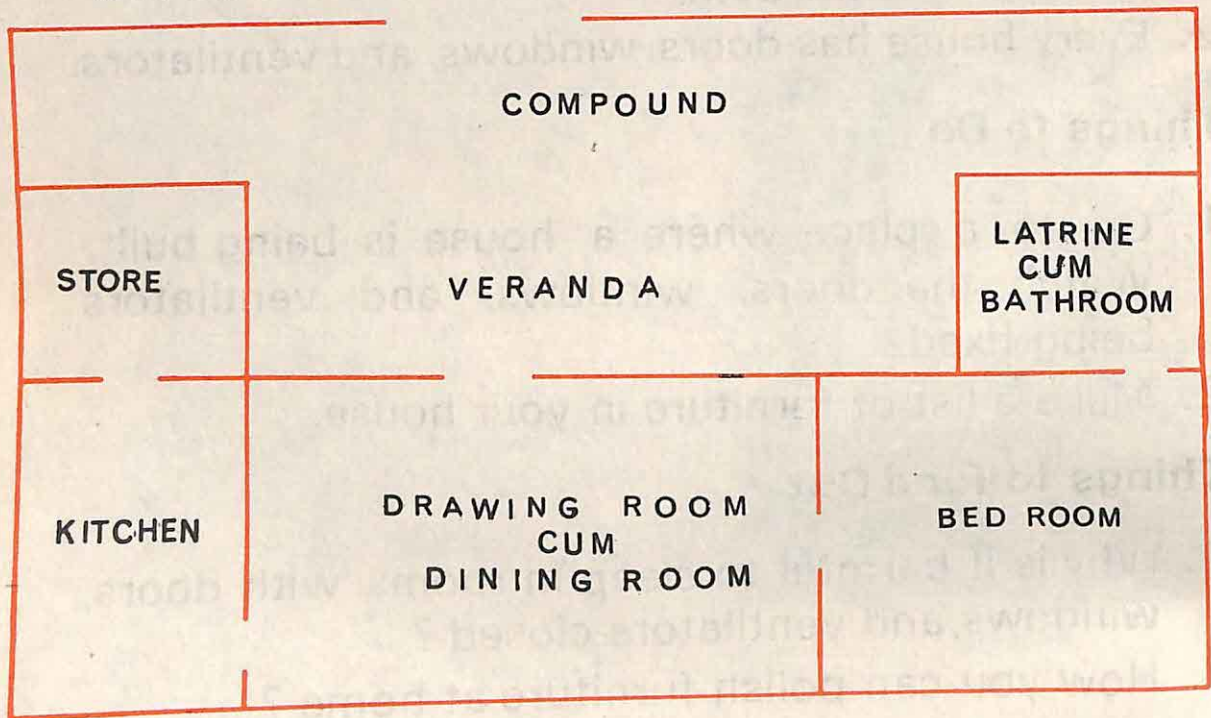
PERSONS WHO HELP US TO BUILD HOUSES

1. The Plan of the House

A house is built according to a plan.

The plan is made by an architect.

He draws a map of the land on which the house will be built.



Plan of a house

On the map he shows the parts of the house.
The house is then built according to this plan.
Building a house involves many jobs.
Different jobs are done by different people.

2. Unskilled Labourers

Unskilled labourers do simple jobs.
They carry bricks and other things.
They mix cement, sand, and water to make mortar.
They rub the floors.

3. The Mason

The mason works with stone.

He cuts stone into different shapes.

Then he lays them at proper places.



A mason

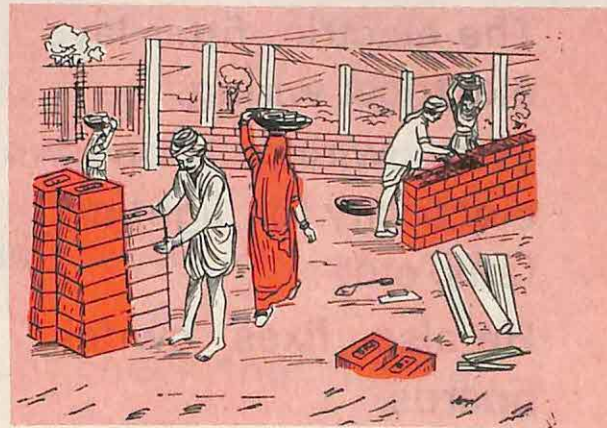
4. The Bricklayer

The bricklayer works with bricks.

He lays bricks to raise walls.

He lays bricks to make floors and roofs.

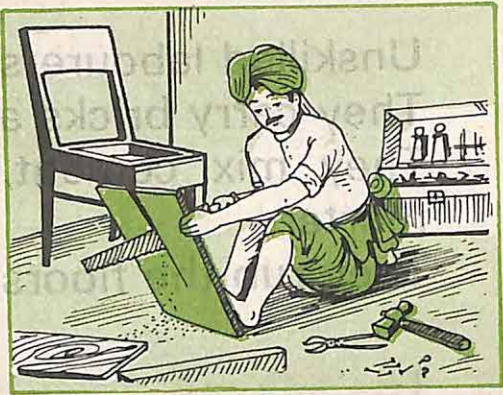
He joins bricks with mortar.



A bricklayer

5. The Carpenter

The carpenter makes things with wood. He makes doors, windows, and cupboards. He fixes the wooden parts of the house.



A carpenter

6. The Plumber

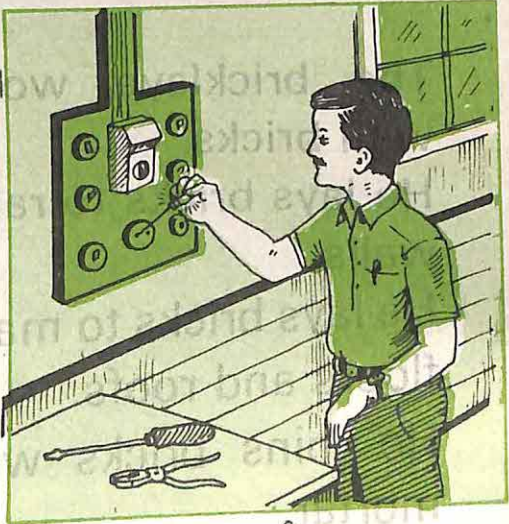
Drinking water comes to the house through pipes. The pipes are fitted by the plumber. The plumber also fixes water taps.



A plumber

7. The Electric Fitter

The electric fitter lays electrical wiring. This wiring brings electricity for lighting, fans, etc. He also fixes switch boards.



An electric fitter

8. Other Workmen

Workmen of many other types are also needed in building houses.

The blacksmith is needed to make things of iron. Such as, grilles and iron frames.

Some workmen white-wash the walls.

Some workmen paint doors and windows.

A glass-cutter is needed for making window panes.



Blacksmith

Things to Remember

1. A house is built according to a plan. The plan is made by an architect.
2. Persons who help us to build houses are mason, bricklayer, carpenter, electric fitter, plumber, blacksmith, etc.

Things to Do

1. Ask your parents to show you the plan of your house.
2. Watch the various kinds of workmen at work.

Things to Find Out

1. How does the bricklayer check that the wall is rising straight?

2. What kinds of wood are used for making doors ?

Match the Items

Draw a line from each workman to his job.

Workman

Mason
Bricklayer
Carpenter
Plumber
Electric fitter
Blacksmith

Job

Raising the wall
Making iron grille
Fixing water pipes
Laying electric wiring
Cutting stone
Making doors

CLEANLINESS IN THE HOUSE

1. Cleanliness and Tidiness

We feel bad in a dirty and untidy house.
We feel good in a clean and tidy house.
In a tidy house things are properly arranged.
Everything is at its proper place.



A clean and tidy room

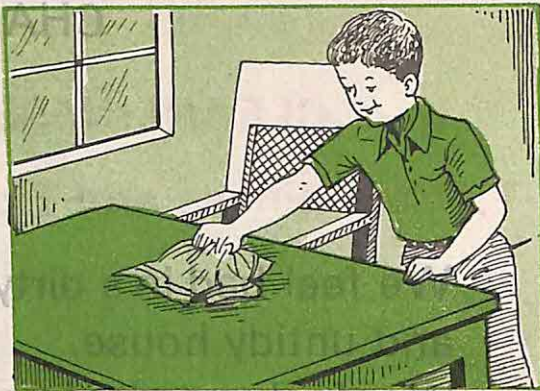
Cleanliness is necessary for health.
There are germs in dust and dirt.
These are too small to be seen with eyes.
Yet, some germs can make us sick.
Therefore, the house should be clean of dirt and dust.

2. Sweeping and Cleaning

Sweep the floors of the house everyday.
Dust the doors, windows, and furniture everyday.



Sweeping the floor



Dusting the furniture

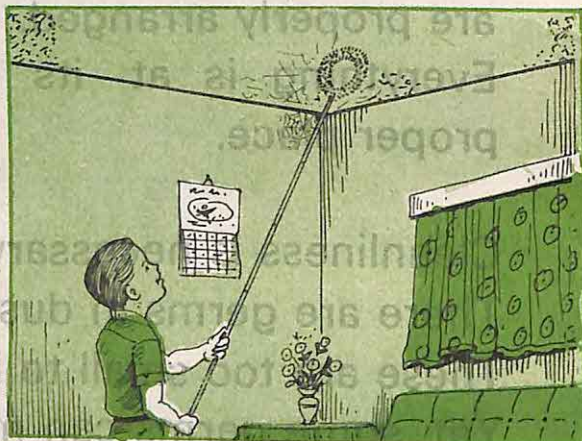
The kitchen should be cleaned after cooking each main meal.

Utensils should be cleaned after use.

Clean the corners and ceilings every week.

Use a long brush for this purpose.

Help your parents to keep the house clean.



Cleaning the ceiling

3. Throwing Garbage

Do not throw garbage here and there in the house.

This will bring house-flies all over.

Throw garbage in a dust-bin.



Dust-bin for garbage

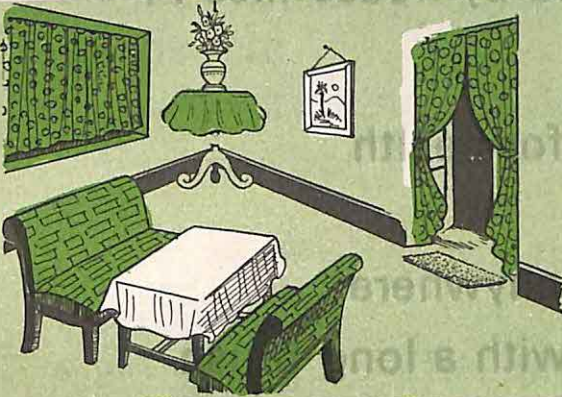
4. Keeping Things in Order

Keep your things at their proper places. Your books, toys, clothes—everything.

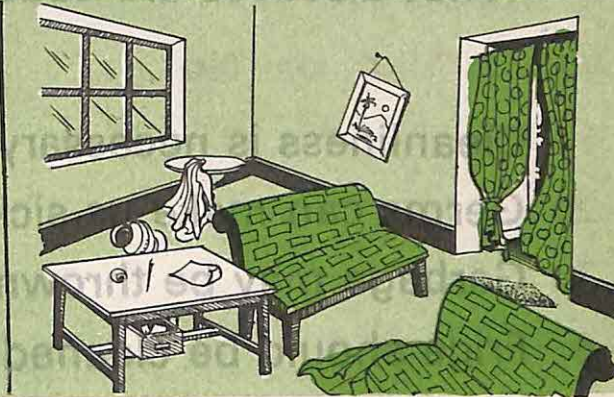
Do not leave things here and there.

Arrange the furniture properly.

It is pleasing when things are kept in order.



Things kept in order



Things kept disorderly

5. Cleanliness of Other Things

There are many other things in the house.

The radio, the television, the fridge, etc.

Dust settles on these things also.

They should be lightly dusted with a soft duster.

Things to Remember

1. Cleanliness in the house is very necessary.
2. Doors, furniture, etc. should be dusted everyday.
3. Garbage should be thrown in covered containers only.
4. All things should be kept in order.

Things to Do

1. Dust the furniture in your house everyday.
2. Keep your books arranged in a shelf.

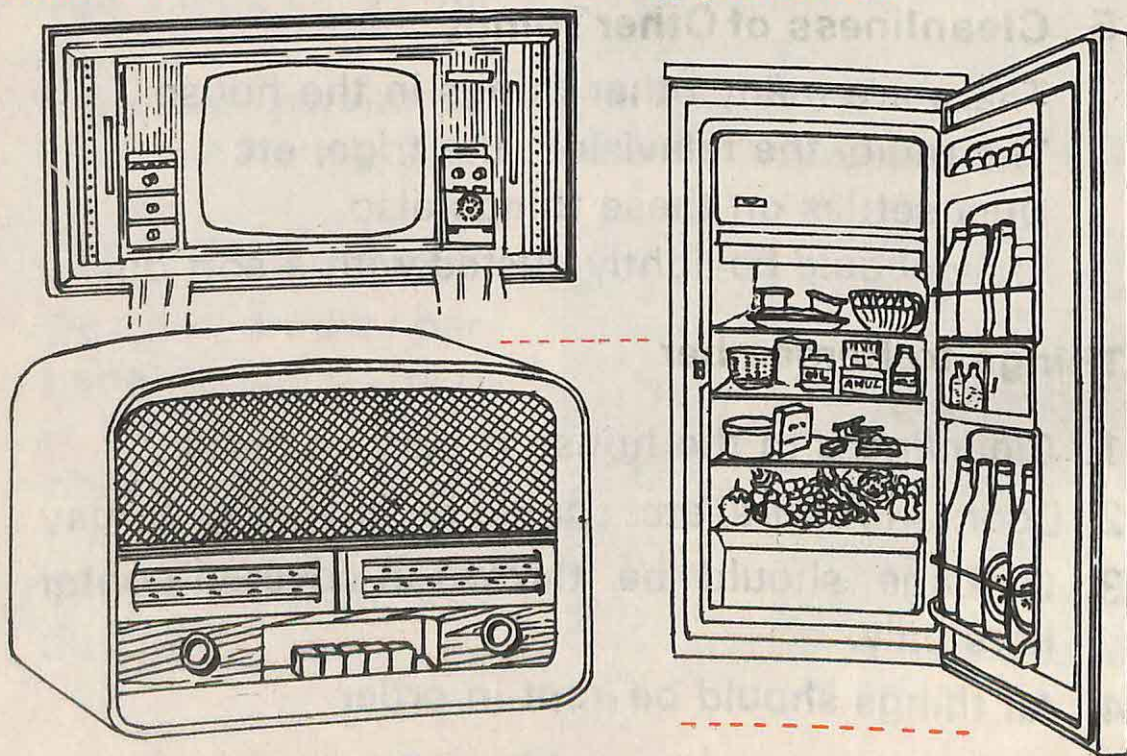
Things to Find Out

1. How are dirty bath tubs cleaned ?
2. What diseases are caused by house-flies ?

Write 'Yes' or 'No'

1. Cleanliness is necessary for health.....
2. Germs can make us sick.....
3. Garbage may be thrown anywhere.....
4. Frige should be cleaned with a long brush.....

Name and colour the following pictures.



USE AND CARE OF THINGS IN THE SCHOOL

1. Use School Things with Care

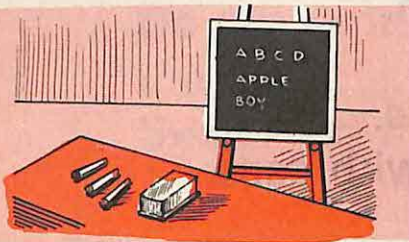
There are many things in the school.

Black boards, desks, chairs, wall maps, water taps, etc.

Use everything with care.

Do not spoil anything.

2. Things in Classrooms



The black board

The blackboard is for the use of teachers.

You should not write anything on it.

Do not jump over desks and chairs.

Do not scratch them.

Do not push them around.

There is a waste paper basket in a corner.

Throw any waste papers in it.



Waste paper basket

3. Water Taps and Bathrooms

Never leave a water tap running.

Open a tap when you need water. Then close it.

Do not throw water around

Use the bathroom properly.

Do not make it dirty.



Water tap

4. Library Books

Do read books from the library.

But, never write anything on them.

Do not make them dirty.

Do not tear off any page or picture.

If you take a book home, keep it with care.

Others will also read it.

5. Lawns and Gardens

Do not pluck flowers.

Do not jump or run over plants.

Do not pull or bend the branches of plants.

Keep the lawns and gardens clean.

Do not throw papers etc. around.



This is bad

6. Playthings



In the school you get many things to play.

The ball, football, carom-board, hockey, etc.

Use these things with care.

Nothing should be lost.

Return the things after use.

7. Other Points

Do not remove maps or pictures hanging on the walls.

Do not write anything on the walls.

Switch off the fan if there is no class in a room.



Things to Remember

1. There are many things in the school for the use of all.
2. These things should be used properly and with care.

Things to Do

1. Draw a picture of a waste paper basket and colour it.
2. Tell your friends about the proper use of things in the school.

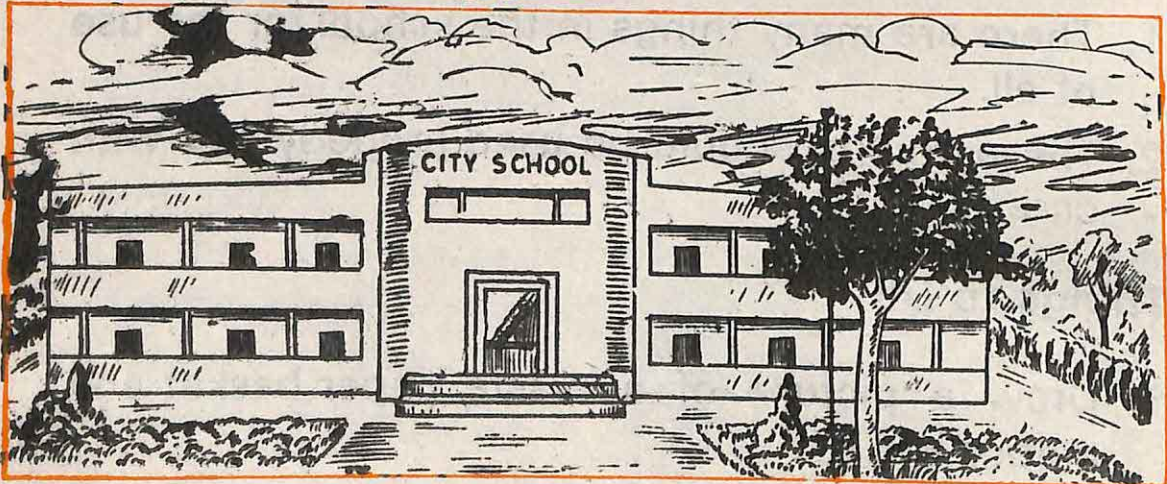
Things to Find Out

1. What is the harm if you pluck a flower in the school garden ?
2. How can you keep your classroom neat and tidy ?

Write 'Yes' or 'No'

1. Blackboards are for the use of all.
2. We should not jump over desks and chairs.
.....
3. A water tap should not be left running.
4. We may throw waste papers in the lawn.
5. We may keep a library book for ever.
6. We should not write anything on the walls.

Colour the following picture



A school building

CHAPTER 7

LEARNING IN SCHOOL

1. Learning in School

You learn many things in school.

You learn how to read and write.

You learn how to draw.

You learn about your environment.

You learn many other things.

You also learn good manners.



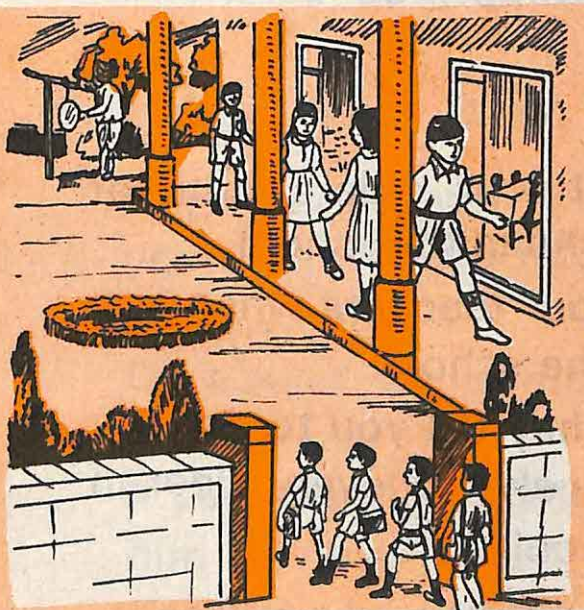
2. Be Punctual

You must learn to be punctual.

Do everything at its fixed time.

Reach the school in time.
Reaching too early is not good.

Reaching late is very bad.
A latecomer disturbs everybody.



Reaching the school

3. Classroom Manners

Take with you everything you will need in the class.

Books, exercise-books, pencil, ruler, etc.

Stand up when the teacher comes to the class.

Sit down after he has taken his seat.



Do not make noise for any reason.

Do not talk to your class-mates.

If you have to speak to the teacher, raise your hand.

When the teacher asks, stand up and speak.

Never talk sitting to your teachers.

4. Respecting Elders



Respect your elders both at home and in the school.

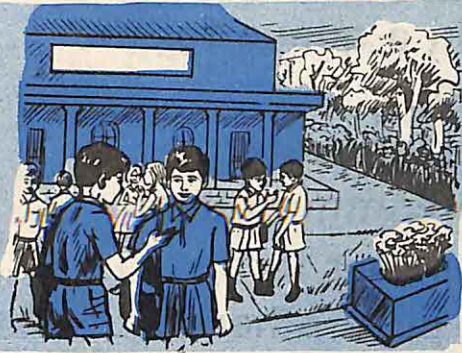
Wish your teachers when you reach the school.

Do as they tell you to do.

Talk nicely to every elder in the school.

Even to a peon or a sweeper.
Everyone does something for you.

5. Make Friends



There are many students in your class

Get to know them.

Make friends with them.

Greet them with a smile

Do not use bad words for anybody.

Play games with your friends.

Follow the rules of the games. Do not be unfair.

There will be no quarrel.



6. Helping Each Other

Someday some one in your class may forget to bring a book.

Or, a ruler. Or, something else.

If you have that thing, let him also use it.

If some one needs your help in his lessons, do help him.



7. Standing in a Queue



Standing in a queue

Stand in a queue for the bathroom.

For drinking water.

For any common thing.

Wait for your turn.

Do not push others.

This makes things easy for every one.

8. Other Good Manners

When you request somebody for something, say 'please'

'Please give me the ruler.

'Please tell me the meaning of this word.

When somebody helps you, say 'thank you'.

Walk about quietly.

Do not call out anybody loudly.

Do not talk in a loud voice.

Do not speak out when somebody is speaking.



Walking silently

Things to Remember

1. You learn many things and also good manners in the school.

2. Always reach the school in time.
3. Do not make noise in the school.
4. Respect your elders.
5. Make friends with your classmates. Help them in anything you can.
6. Stand in a queue for any common thing.
7. Learn to say 'please' and 'thank you'.

Things to Do

1. Take part in various games in the school.
2. Read stories of how friends help each other.

Things to Find Out

1. What type of children are liked by all ?
2. 'A friend in need is a friend indeed'. What does this proverb mean ?

Write 'True' or 'False'.

1. It is good to reach school very early.....
2. You should make friends with your classmates.
.....
3. You should not allow anybody to use your things in the school.....
4. You should stand up when a teacher enters the class.....
5. It is a good manner to stand in a queue for anything common.....

CHAPTER 8

SERVICES IN THE NEIGHBOURHOOD

1. Neighbourhood Provides Many Services

We all need certain services close at hand.

Some of these are : market places, post office, hospital, etc.

All of these are available in a good neighbourhood.

In some neighbourhoods many other services are also available.

2. The Market

Things of daily use can be had in the neighbourhood market. We don't have to go far to buy them.

There are shops selling groceries (foodstuffs, soaps, etc.), vegetables and fruits, clothes, sweets, medicines, etc.

There are tailors' shops, barbers' shops, and dry-cleaners' shops, too.

In a big neighbourhood the market has restaurants, banks, and doctors' clinics also



A neighbourhood market

3. The Post Office

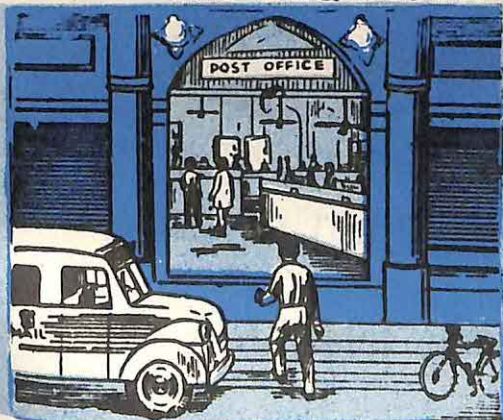
There is a post office in every neighbourhood. Through it we send letters, gifts, and money to our friends and relatives.

I. SENDING LETTERS

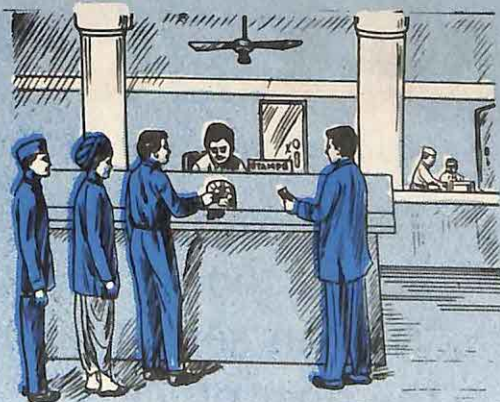
We buy post-cards, inland letters, or envelopes at the post office to write letters.

Then we write the address of our friend or relative.

The addressed letter is put into a letter box.



A Post Office



Purchasing post-cards etc., at the post-offi

II. SENDING GIFTS

The gift is wrapped into a parcel. Postage stamps of right amount are affixed on it.

The stamped and addressed parcel is handed over at the post office.

III. SENDING MONEY

We write the amount of money and the address to which it is to be sent in a form.

This form is known as money order form.

We also put our address on the money order.

Then we give the money and the money order form at the post office.

The post office charges a very small fee for this service.



A postman delivering a post-card



Delivery of money order

The postman delivers the letters, gift parcels, etc., to the addressee.

We can send urgent messages by telegrams at the post office.

We can open a saving bank account with the post office.

In this account we can deposit money.

Our money is safe with the post office.

We can have it whenever we need.

4. Hospital and Dispensary

A neighbourhood has a dispensary.

Doctors attend the dispensary morning and evening.

They examine patients and prescribe medicines.

We get free medicines at the dispensary.

Sick injured, and wounded people are cared for at the hospital.

The hospital has many doctors and nurses.



A dispensary



A hospital

5. Community Centre

A community centre is a place for the common use of the people in the neighbourhood.

There is a hall where meetings are held.

People can watch television and listen to radio in the community halls. They can read newspapers and magazines.

Marriage parties are stayed at the community centre.

Many social festivals are celebrated at the community centre.

6. Panchayat Ghar

A panchayat ghar is a community centre in a village.

It is here that the village panchayat meets.

The village panchayat looks after the welfare of the villagers.

It consists of several panchs and a sarpanch.

They are all elected by the villagers from amongst themselves.

Evening classes are held for adults in the panchayat ghar.

Every panchayat ghar has a radio set. People assemble to hear news and other programmes.



A panchayat ghar

Things to Remember

1. A neighbourhood has a market, a post office, a hospital, and a community centre.
2. The community centre in a village is called panchayat ghar.

Things to Do

1. Take a letter delivered at your home by the postman. Read the address on it. Learn to write address on postal articles.
2. Learn to fill in a money order form.

Things to Find Out

1. What other services are available in your neighbourhood ?
2. What are the postal rates for parcels and money orders ?

Tick (✓) the Correct Word

1. We may not get (tooth-paste / bicycle) in a neighbourhood market.
2. A (post-card / money order) is dropped in the letter box.
3. A panchayat ghar is a community centre in a (city / village).
4. Every neighbourhood has a (post office / panchayat ghar).

CHAPTER 9

OUR HELPERS IN THE NEIGHBOURHOOD

1. Need for Help

The whole family goes to sleep in the night. Shopkeepers close their shops and go back homes.

Thieves may break into a house or a shop. It is really a big problem.

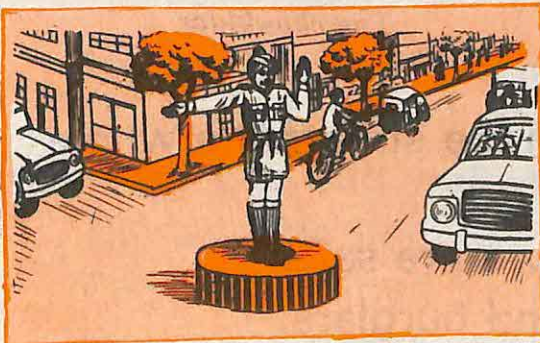
There are many other problems in daily life. We need help from others to get them over. Many people in the community help us. Let us know about our helpers.

2. The Policeman

The policeman helps us in many ways.

He regulates traffic at crossings.

He works hard to prevent accidents.



A policeman controlling traffic



A policeman rounding up a thief

The policeman helps us at fairs.

He guides us properly.

He helps lost children to find their parents.

The policeman rounds up bad people.

He saves us from thugs and rogues.

If someone harms us, we should go to a policeman.

He will help. He is our friend.

3. The Chowkidar

There is one chowkidar in every neighbourhood.

In a big neighbourhood there may be two or more chowkidars.

The chowkidar guards houses and shops in the neighbourhood at night.

He carries with him a lathi and a torch.

He marches up and down the streets the whole night.

He keeps awake so that we are safe.

He keeps away thieves and burglars.



The chowkidar

4. The Watchman

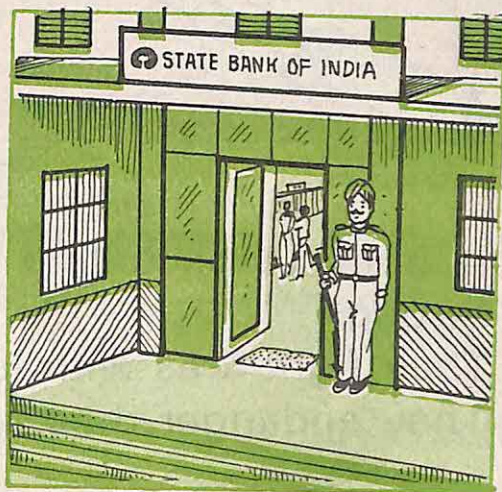
Banks and big shops employ watchmen to guard their establishments.

A chowkidar guards all houses and shops in the neighbourhood.

A watchman guards only a particular building.

But, he is helpful to other neighbours also.

Usually, a watchman is armed with a gun, bayonet, etc.



A watchman guarding a building

There are different watchmen for day and night.

Museums, zoos, and Government offices are also guarded by watchmen.

5. The Fire-Fighters

The outbreak of fire in a building is very frightful. It causes loss of life and property.

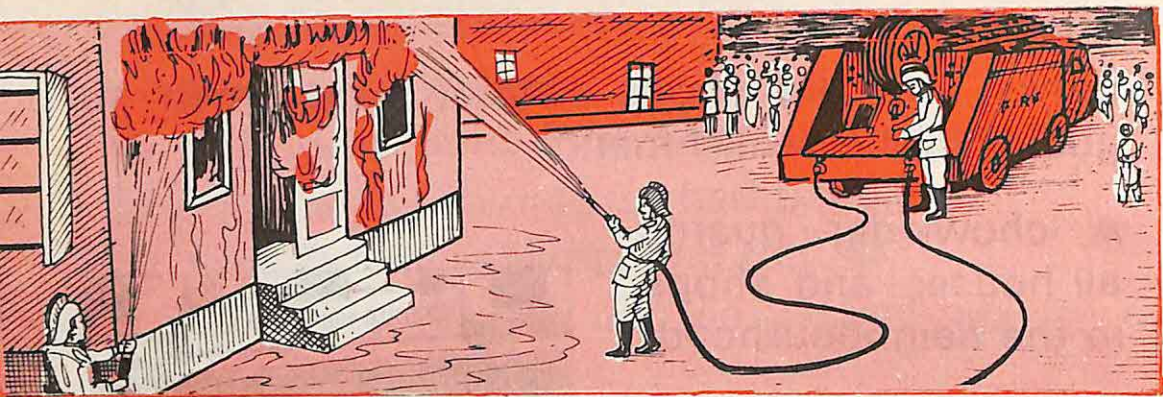
Every city and big town has a fire-brigade.

The brigade people wear special uniform.

They are trained to fight fires.

They rush to the spot on hearing about the fire.

They use their red-painted truck for this purpose.



A fire brigade putting out a fire

A man keeps tolling a bell as the truck speeds through.

They fight fires with long water pipes.

They endanger their lives to save others.

Things to Remember

1. Many people in the community help us.
2. The policeman saves us from bad people.
3. The chowkidar guards houses and shops at night.
4. The watchman guards some particular house or shop.
5. Fire-brigade people fight fires in buildings.

Things to Do

1. See a traffic constable regulating traffic at a crossing.
2. Talk to a policeman. Ask him to tell you about his work.

Things to Find Out

1. Which establishments in your neighbourhood have their own watchmen ?
2. How can small fires be put out ?
3. How to avoid risk of a fire at home ?

Write 'True' or 'False'.

1. A policeman is our friend.
2. We should be afraid of a policeman.
3. A chowkidar guards the whole neighbourhood at night.
4. A watchman guards the whole neighbourhood day and night.

CHAPTER 10

PRODUCTION OF THINGS IN THE NEIGHBOURHOOD

1. Needs of the Family

Many things are needed in the family.

Foodstuffs, clothings, medicines, soaps, crockery, shoes, furniture, books, etc.

The list of things we need is endless.

Some of these are produced in the neighbourhood.

Others are produced at far off places.

Let us learn about things which are produced in the neighbourhood.

2. Agricultural Products

Often, there are agricultural farms in the neighbourhood.

These farms produce cereals and pulses.

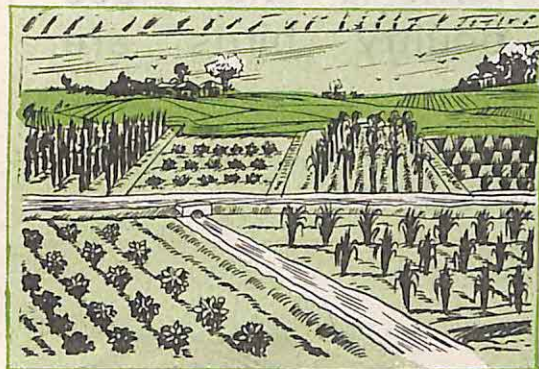
Cereals are of many kinds—wheat, rice, maize etc.

They are important part of our food.

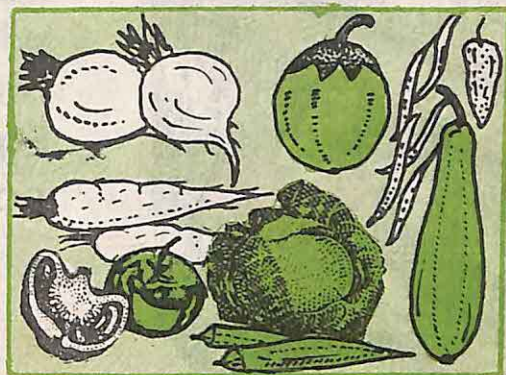
Pulses, too, are of many kinds—peas, beans, lentils, etc.

Some farms grow cotton for our clothes and beddings.

Some grow vegetables—potato, tomato, brinjal, cabbage, cauliflower, etc.



An agricultural farm



Agricultural products

3. Horticultural Products

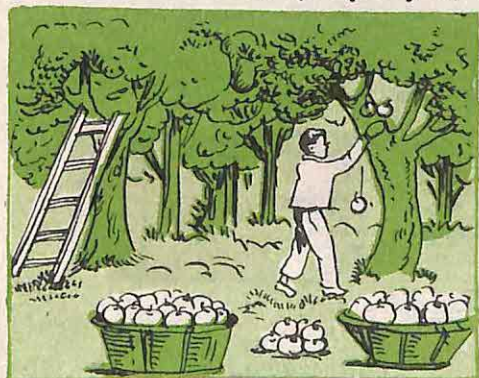
Growing fruits and vegetables is called horticulture.

Many neighbourhoods have horticulture farms.

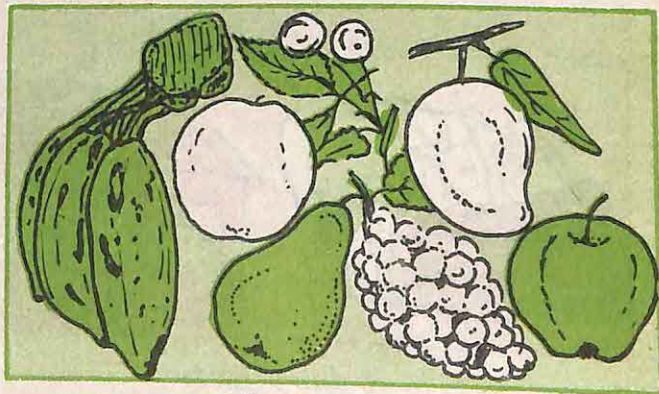
In these farms they grow fruits and vegetables.

An enclosed piece of ground where fruit trees are grown is called an orchard.

Some commonly grown fruits are mango, guava, banana, papaya, peach, etc.



An orchard



Horticultural products

4. Poultry and Dairy Products.



A poultry farm

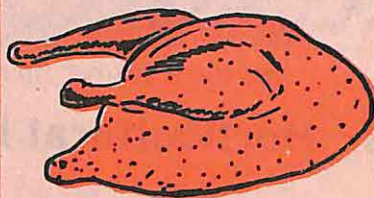
Poultry means hens, ducks, and other table birds.

Poultry farm is the place where poultry birds are reared.

Eggs, chicken, etc. are poultry products.



eggs

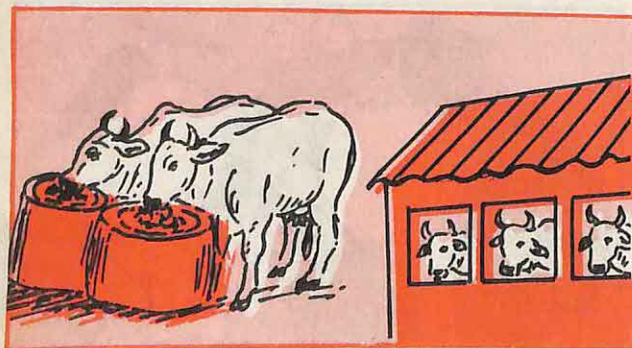


chicken

Poultry products

A dairy farm is the place where cows and buffaloes are raised to produce milk.

Milk is used to make butter, ghee, cheese, curd, etc.



A dairy farm



Dairy products

5. Processed Foods and Bakery Products

We use many processed foods.

Fruit squashes, jellies, jams, pickles, vegetable sauces, etc., to name some.

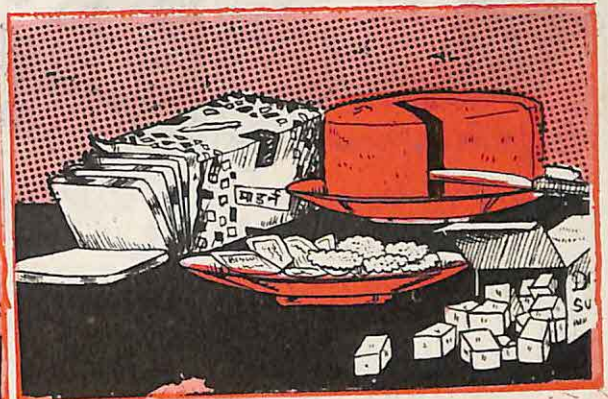
Squashes, jellies, and jams are made from fruits.

Pickles and vegetable sauces are made from vegetables.

These are often made in workshops in the neighbourhood.



Processed foods



Bakery products

Breads, cakes, biscuits, etc, are bakery products.

Many bakery products are made in the bakeries in the neighbourhood.

6. Garments

Many kinds of garments are made in neighbourhood workshops.

Some people spin thread. The thread used for weaving and knitting is called yarn.

Some people weave yarn into clothes, durries, bed-covers, etc.

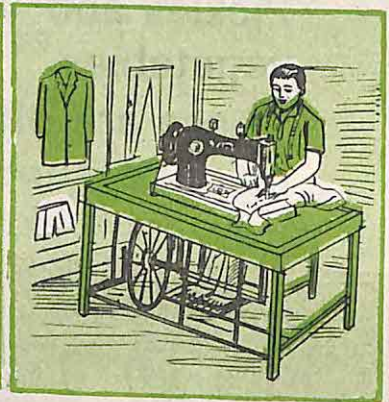
Still some others make garments from clothes. These are called tailors.



Spinning yarn



Weaving yarn



A tailor

7. Small Scale Industries

Production of any kind of goods is called industry.

Garment making, shoe-making, furniture-making, etc., are all industries.

In a small scale industry only a few people work.

Very often these workers are the members of the same family.

The industry is housed in a small building. The building is called a workshop.

Sometimes a part of the living house is converted into a workshop.

Most industries in the neighbourhood are small scale industries.

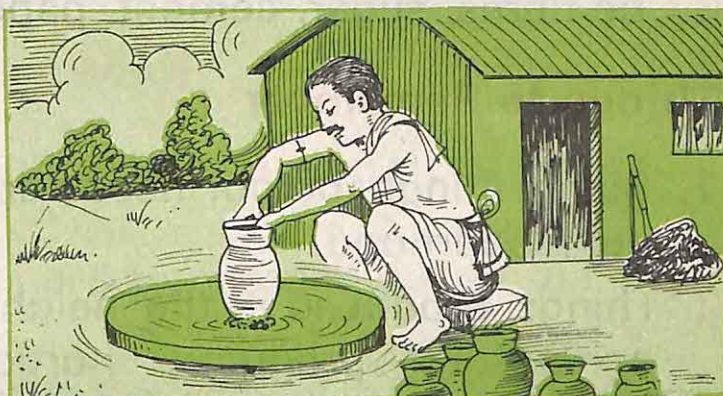
A small scale industry is started with a small amount of money.

Jams, jellies, pickles, etc., are often made by small scale industries.

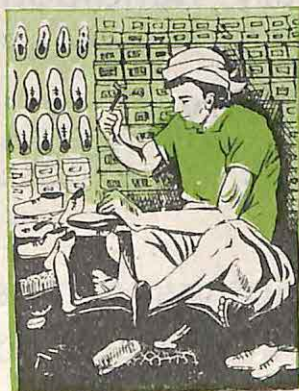
Pottery, handloom weaving, shoe-making, toy-making, wood-work, etc., are some small scale industries in the neighbourhood.



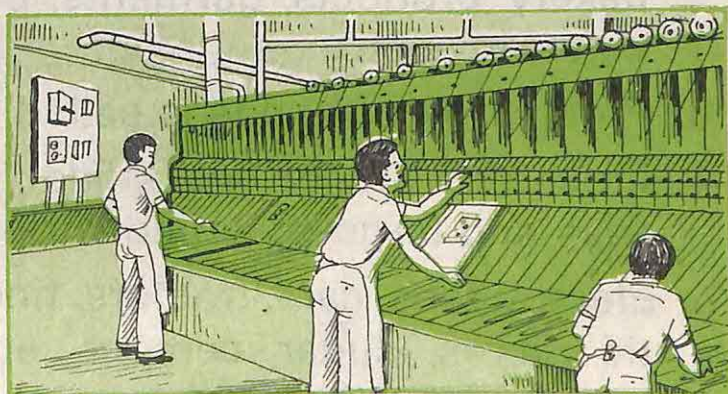
Toy making



Pottery



Shoe making



A factory

8. Large Scale Industries

An industry having a large number of workers is a large-scale industry.

It is housed in a big building called a factory.

A large amount of money is needed to start a large scale industry.

In a large scale industry most of the work is done by machines.

These machines are very costly.

Large scale industries produce such goods as electric fans, cars, tractors, fine clothes, synthetic fibres, sugar, cement, paper, etc.

Things to Remember

1. Many things of our needs are produced in the neighbourhood.
2. Things produced in the neighbourhood include agricultural products, horticultural products, poultry and dairy products, processed foods, bakery products, garments, pottery, handloom-cloth, toys, etc.
3. Production of goods is called industry.
4. Industries are of two kinds : small-scale industries and large-scale industries.
5. Electric fans, cars, tractors, fine clothes, synthetic fibres, sugar, cement, etc., are made by large scale industries.

Things to Do

1. Make a list of things produced in your neighbourhood under the headings agricultural products, horticultural products, etc.
2. Visit the agricultural and horticultural farms in your neighbourhood.

Things to Find Out

1. How are jams, jellies, and pickles made ?
2. How are breads, cakes, and biscuits made ?

Tick (✓) the Correct Word

1. Pulses are (agricultural/horticultural) products.
2. Jams and jellies are (processed foods bakery products).
3. (Paper/earthenware) is made by large scale industry.
4. Sugar is made by (small/large) scale industry.
5. A workshop is (bigger/smaller) than a factory.

Write the Names of

1. Three cereals

1 2 3

CHAPTER 11

SANITATION IN THE NEIGHBOURHOOD

1. What is Sanitation ?

Sanitation means arrangements to prevent diseases.

Most diseases are caused by germs.

Germs are very, very small living things.

So small that we cannot see them.

They live on dust.

They live on dirt.

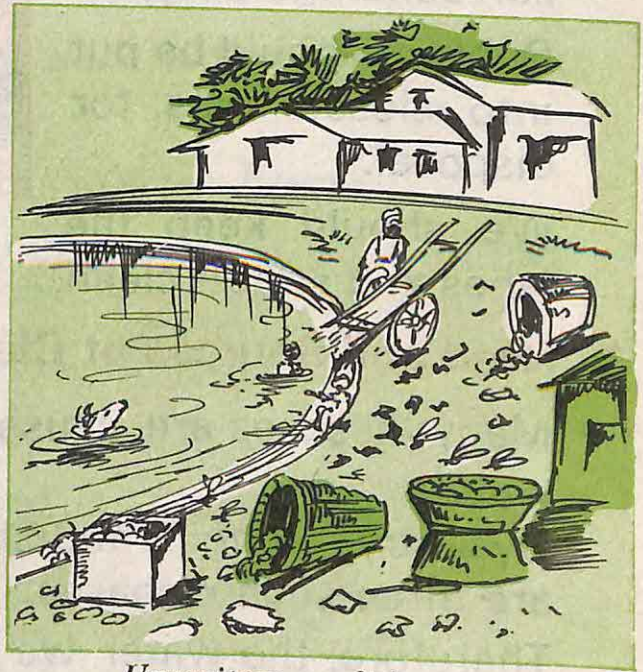
They are there on rotten things.

They breed in rubbish and waste matter.

They may be found in the waters of ponds, wells, and rivers.

If the neighbourhood is clean, there will be no germs.

There will be no diseases.



Unsanitary conditions

Sanitation in the neighbourhood means to keep the neighbourhood clean.

2. Keeping Surroundings Clean

To prevent diseases, we must keep the surroundings clean.

Waste material should be properly got rid off.

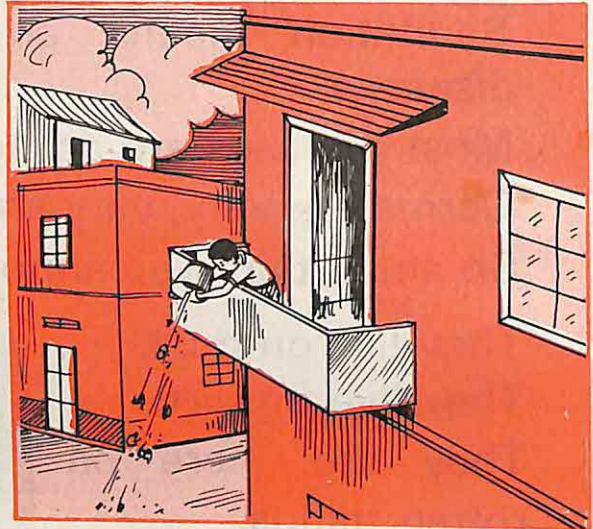
We must clean our houses everyday.

But, the rubbish should not be thrown into lanes or on roads.

This will make the surroundings dirty.

Rubbish should be put into closed bins for disposal.

We should keep the lanes and streets clean.



This is bad

3. Need and Sources of Clean Water

Many diseases are caused by germs present in water.

Dysentery, typhoid, and cholera are three such diseases.

Therefore, the water we drink must be free from disease germs.

Such water is provided by deep wells, springs, and fast flowing rivers.



A covered well

Wells should be properly covered.

Dust, dirt, insects, etc., keep falling in open wells. The water of such wells is unsafe to drink.

In towns, cleaned water is sent to homes through pipes.

4. Need for Fresh Air

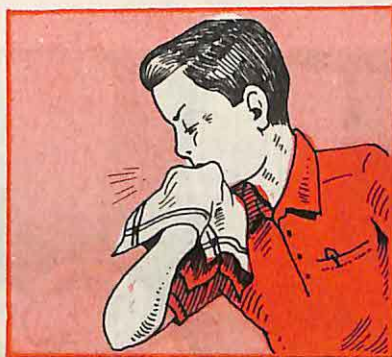
Fresh air is necessary for good health. Windows and ventilators should be kept open to have fresh air in the room.

The air around plants is fresh.

Therefore, you should walk in the garden or by the fields every day.

You should grow plants in your home.

When you sneeze or cough, cover your mouth.



Right



Wrong

Otherwise, you will make the air impure.

5. Smoke in Air

Smoke from burning fuels goes into air.

In cities, mills and factories send large amounts of smoke into air.

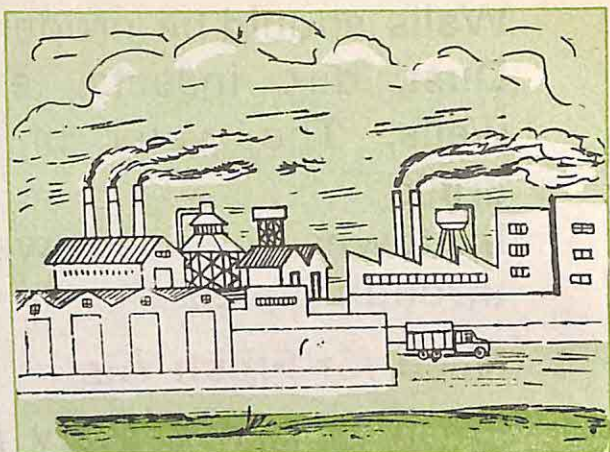
Automobiles also give out smoke.

Smoke makes the air impure.

It causes burning feeling in eyes, nose, and throat.

We should avoid breathing air containing smoke.

We should have houses and schools away from mills and factories.



Smoke from a factory

6. Waterlogging

Malaria is a fearful disease.

It causes much weakness.

Malaria is caused by the bite of mosquitoes.

Mosquitoes breed in standing water.

Therefore water should be drained properly.

It should not be allowed to collect in pools.



Mosquito bite causes malaria

Things rotting in pools make the air foul.
There is bad smell all around.

7. Domestic Animals and Pets

Domestic animals and pets make the surroundings dirty.

Their living places should be cleaned every day.

Many germs breed in the dirty bodies of animals.

Therefore, the bodies of domestic animals and pets should be regularly cleaned.

They should be bathed with water and soap.



8. Food Sanitation and Adulteration

The food we eat must be clean.

It must be pure.

Unclean and impure food causes diseases.

Uncovered food becomes dirty. It is unfit for eating. Cooked food should be kept under cover.

We should not eat uncovered food.

Food should be cooked in clean utensils and in clean surroundings.

Food should be eaten in clean utensils and in clean surroundings.

All foodstuffs must be pure.

Dishonest traders often mix harmful things with

foodstuffs. They mix coloured sawdust with turmeric powder. They colour chilli powder. Impure foodstuffs are very harmful. We must buy only pure foodstuffs.

9. Use and Misuse of Cowdung

Many people have cows and other cattle in their houses.

Their dung should be put into pits and covered. After sometime it makes good manure.

It is put into soil to make plants grow better.



Making dung cakes inside or around the house is insanitary.

Moreover, it is misuse of cowdung to burn it away.

Its proper use is as manure.

Things to Remember

1. Sanitation means arrangements to prevent diseases.
2. We must keep the houses, lanes, and roads clean.
3. Dysentery, typhoid and cholera are caused by germs present in drinking water.
4. Fresh air is necessary for good health.
5. Smoke makes the air impure.

6. Malaria is caused by the bite of mosquitoes.
7. The mosquitoes breed in standing water.
8. The living places of domestic animals and pets should be cleaned every day.
9. Unclean and impure food causes diseases.
10. The proper use of cowdung is to make manure.
11. It is misuse of cowdung to make cakes and burn them.

Things to Do

1. Visit a pool of standing water. Note that there are lots of mosquitoes.
2. Visit a factory which gives out smoke. Feel the difference in the air around.

Things to Find Out

1. What are the signs of dysentery and cholera ?
2. How can we protect ourselves from mosquitoes.

Write 'True' or 'False'

1. Germs cannot live in water
2. Drinking unclean water may cause dysentery.
.....
3. Malaria is caused by drinking unclean water.
.....
4. Cowdung should be dried and burnt as fuel.
.....
5. Mosquitoes breed in standing water

Tick (✓) the Correct Word

1. Mosquito bite causes (malaria/cholela).
2. Air around (plants/factories) is pure.
3. Sanitation is needed for (curing/preventing) diseases.
4. The proper use of cowdung is as (fuel/manure).

CHAPTER 12

FESTIVALS IN THE NEIGHBOURHOOD

1. Religious Festivals

We all celebrate religious festivals.

Hindus have Dussehra, Dewali, Holi, and other festivals.

Muslims have Id.

Christians celebrate Christmas.

Sikhs have Gurupurva.

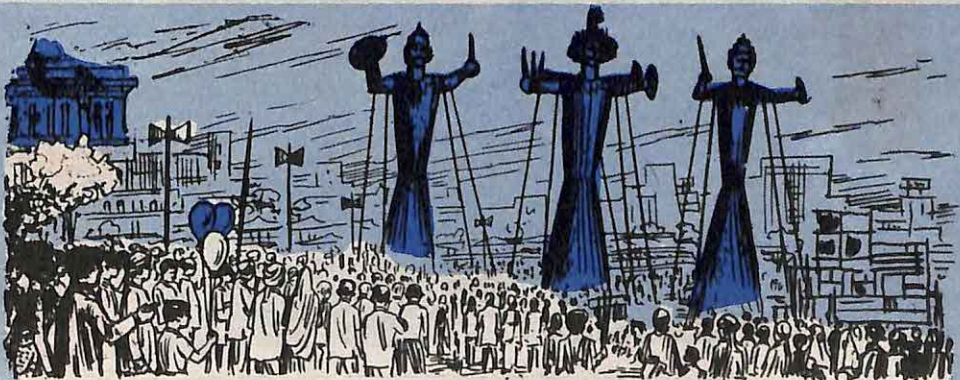
These festivals are celebrated at home and also in the neighbourhood.

In the neighbourhood celebrations all people take part.

2. Dussehra

Dussehra is celebrated to remember the victory of Ram over Ravana.

Ram stands for goodness. Ravana stands for wickedness.



Dussehra celebrations

So, Dussehra is the festival of the victory of goodness over wickedness.

At Dussehra, tall effigies of Ravana, his brother Kumbhkarna, and his son Meghnad are burnt.

Lots of crackers are fired.

3. Dewali

Dewali is the festival of lights.

Ram came back to Ayodhya on this day.

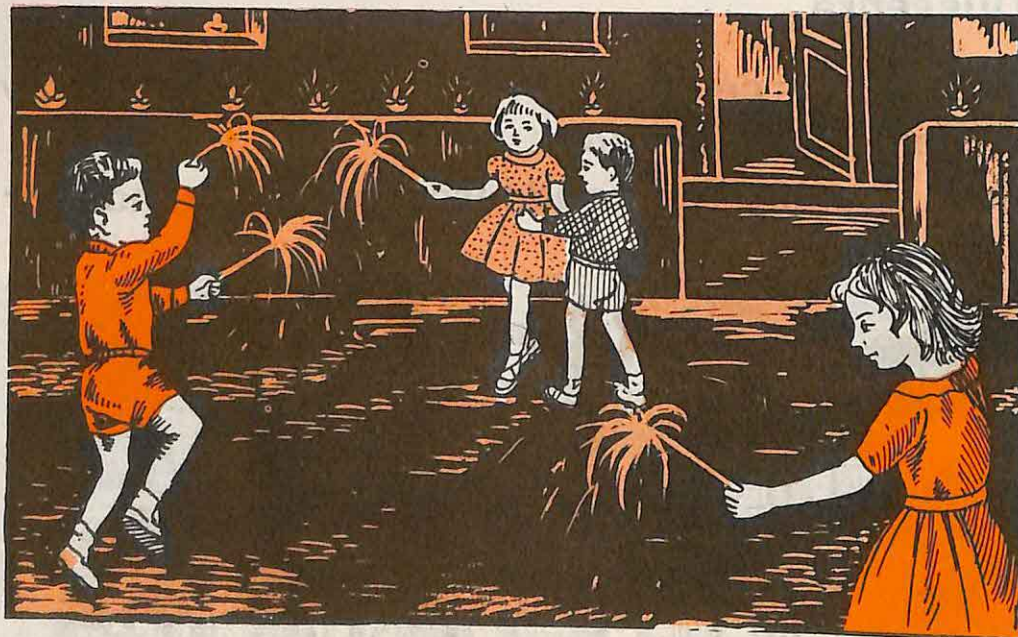
So, there is rejoicing all over.

Goddess Lakshmi is worshipped.

Lights are put on over all the houses.

Shops and bazars are decorated with lights.

Late in the evening people move out to see the lights in the neighbourhood.



Dewali celebrations

4. Durgapuja

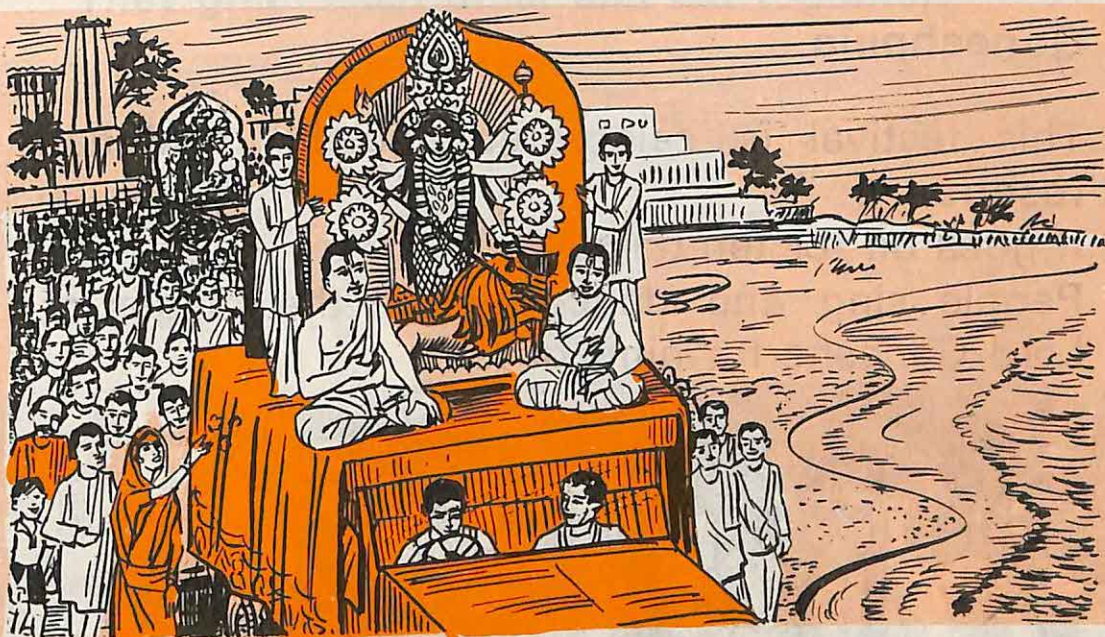
Durgapuja is a part of the ten-day long Dussehra festival.

For nine days people worship Goddess Durga. Beautiful images of Goddess are placed in homes and temples.

On the tenth day these images are taken out in procession.

There is joyful singing and dancing on the way.

Then the images are immersed in a holy river.



5. Holi

Durgapuja

Holi is the spring festival of fun.

In the evening bonfires are lit in the neighbourhood.

These bonfires signify that good is never harmed while evil is burnt away.

From next morning up to noon people play with coloured water.

They apply *gula* on the faces of each other.



Children playing with coloured water

5. Ganeshpuja

This festival is celebrated mostly in Maharashtra.

It goes on for ten days.

People sing and dance before the images of Lord Ganesha for nine days.



Ganeshpuja

On the tenth day, the images are taken out in procession.

These are then immersed in holy waters.

7. Lohri

Lohri is mainly celebrated in Punjab.

The occasion is the harvesting time in winter.

A bonfire is lit in the evening.

People from neighbourhood dance and sing around the bonfire.

They greet each other and eat together.



A scene at Lohri celebrations

8. Onam

Onam is the harvest festival of Kerala.

A special feature is the boat races.

People in the boats sing songs to the beat of drums.

Kathakali dances are performed in the evening.



Boat race on Onam

9. Pongal

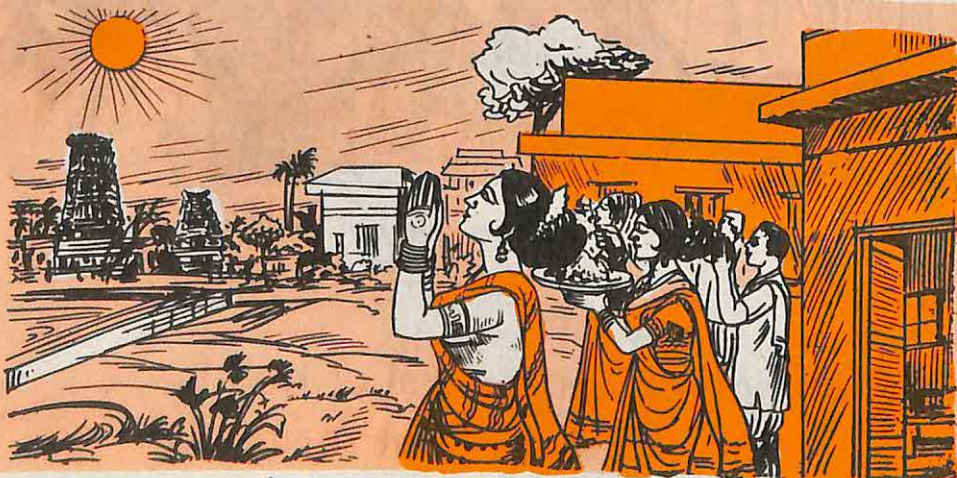
Pongal is a Hindu festival of South India.

It is a three-day festival.

First day is a family festival, called Bhogi Pongal.

Second day people worship sun. It is Surya Pongal.

Third day, cattle are worshiped. It is Mattu Pongal.



Sun-worship on Surya Pongal

10. Id or Id-ul-Fitr

Id-ul-Fitr is a Muslim Festival.

It comes at the end of thirty days of fasting. Sweets are made in homes.

People wear new clothes to celebrate Id. Men offer prayers in mosques.



Id celebrations

After the prayers they embrace each other. They give alms to the poor.

11. Christmas

Christmas is a religious festival of Christians.

It comes on the 25th of December.

Jesus Christ was born at midnight on this day.

Christians celebrate his birth with joy.

They decorate their homes. They put lit stars on the windows. A christmas tree is put up.

At midnight they go to church.



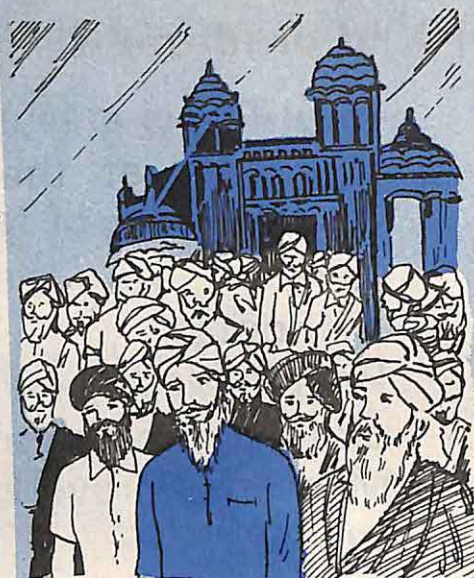
Christmas celebrations at home

12. Gurupurva

It is a festival to celebrate the birthday of Guru Nanak. Guru Nanak was founder of Sikh religion.

Sikhs offer special prayers in Gurudwaras to celebrate Gurupurva.

They offer free food and sweets to one and all.



Gurupurva celebrations

13. Take Part in Religious Festivals

All religions are good.

They teach us how to live happily with others.

You should take part in the festivals of all religions celebrated in your neighbourhood.

Things to Remember

1. People of different religions have different festivals.
2. Religious festivals are occasions of joy.
3. Religious festivals are celebrated both at home and in the neighbourhood.
4. We should take part in the festivals of all religions.

Things to Do

1. Make cardboard effigies of Ravana, Kumbh-karna, and Meghnad.
2. Watch the celebrations in various religious festivals.

Things to Find Out

1. Why is Goddess Durga worshipped ?
2. What is the story related to the Holi festival ?

Write the Names of

1. The Hindu festival of lights.
2. The spring festival of fun.
3. The harvest festival of Kerala.
4. A Muslim festival.
5. A Christian festival.
6. A Sikh festival.
7. A festival specially celebrated in Maharashtra.

Fill in the Blanks

1. On Dewali we worship Goddess
2. Lohri is mainly celebrated in
3. Christmas is the celebration of the birthday of
4. Gurupurva is the celebration of the birthday of

CHAPTER 13

KINDS OF PLANTS

1. Many kinds of Plants

There are many kinds of plants on earth.

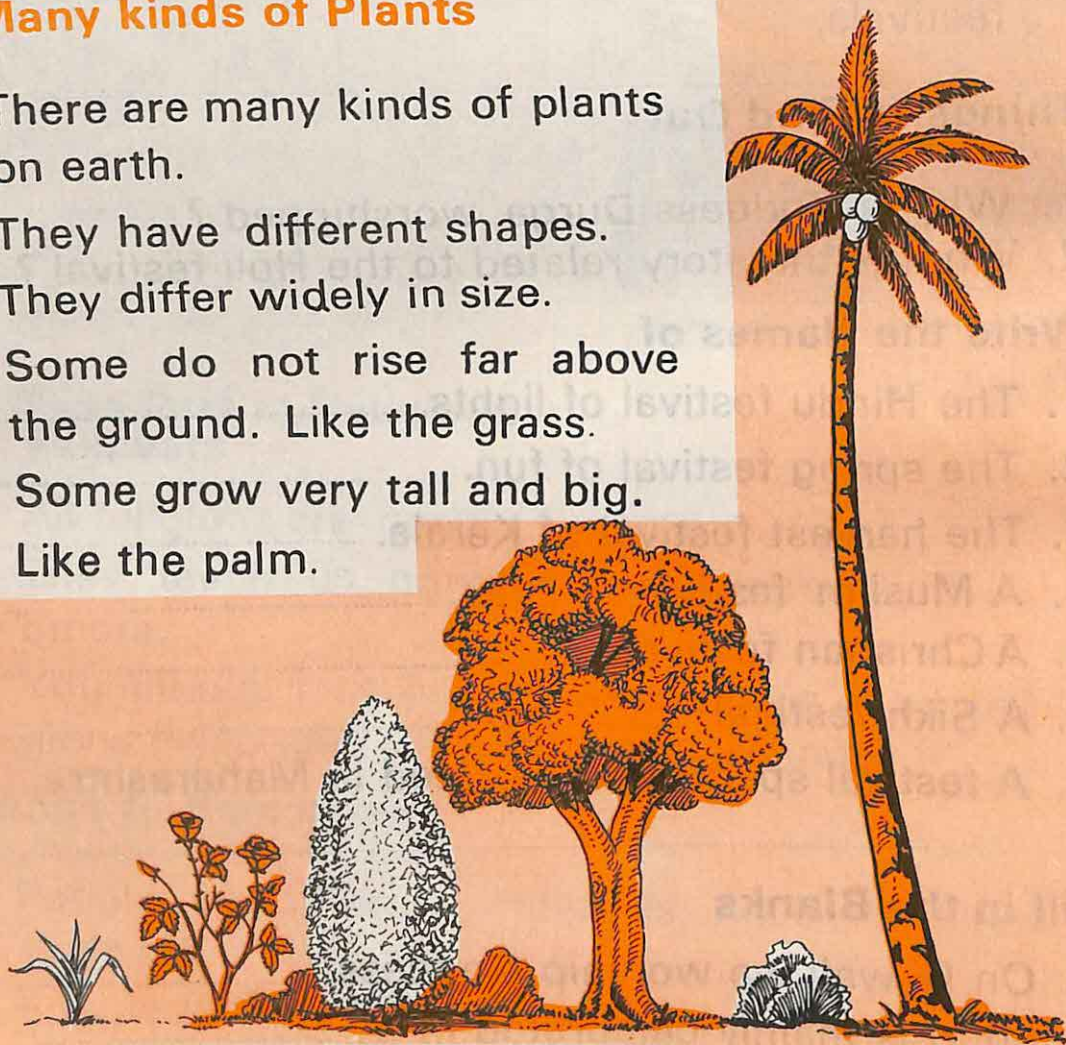
They have different shapes.

They differ widely in size.

Some do not rise far above the ground. Like the grass.

Some grow very tall and big.

Like the palm.



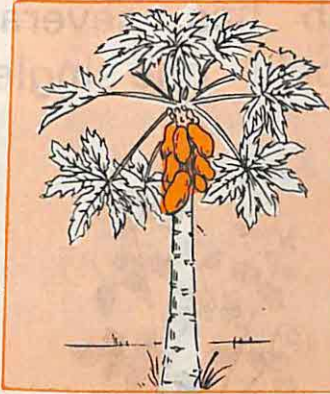
According to their size, plants are called trees, shrubs, and herbs.

2. The Trees

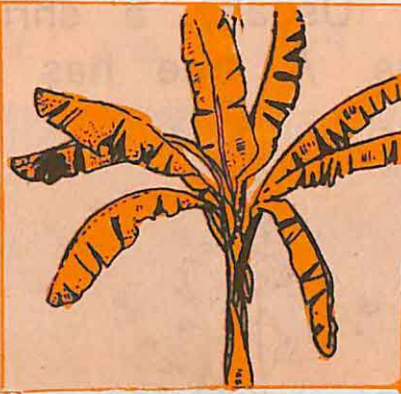
Tall plants are called trees.

Their stems are strong. So they grow erect.

Some trees grow straight up. Like papaya, banana, pine and palm.



Papaya



Banana



Pine

Some trees throw their branches on all sides.

Neem, mango and banyan are three such trees.

These trees give shade in the sun.



Neem



Mango



Banyan

3. Shrubs

Plants smaller than trees are called shrubs.

They go about one metre high.

Their stems are thin. But, they are woody like those of trees.

They throw branches just above the ground. Therefore they look bushy. Some common shrubs are dahlia, *mehandi*, rose, jasmine, and bougainvillea. Usually, a shrub has several separate stems. A tree has only one single thick stem.



Dahlia



Bougainvillea



Rose

4. Herbs

Low growing plants are called herbs.

Their stems are green, very thin, and soft.

Lettuce, mint, ginger, and daisy plant are herbs.



Ginger



Mint



Daisy

5. Life Span of Plants

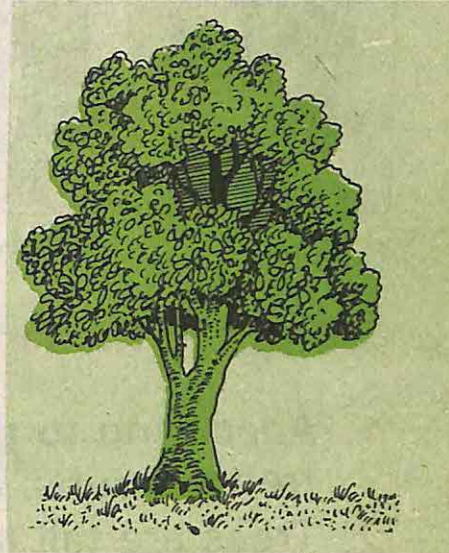
Plants also differ in their spans of life.

Some plants live from year to year.

Such plants are called perennials.

All trees are perennials.

They give flowers and fruits every year.

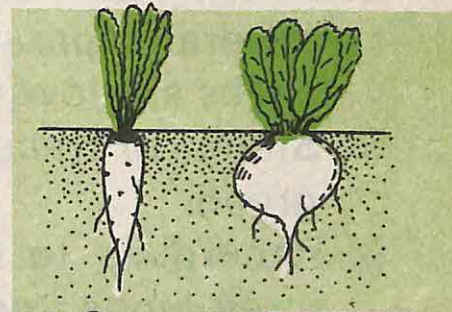


A perennial

Some plants live for two years.

These are called biennials.

Carrots, beets, and turnips are biennials.



Carrot

Beet

Some plants live for only one season and then die.

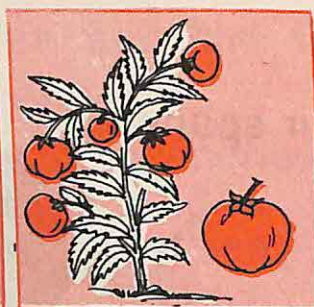
These are called annuals.

Many garden plants such as peas, tomatoes, and lady's finger are annuals.

Cereal plants such as wheat, gram, barley, and maize are also annuals.



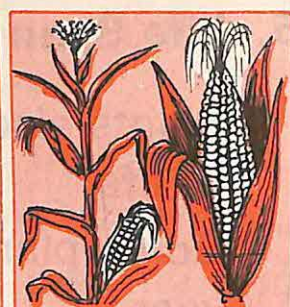
Pea



Tomato



Lady's finger



Maize

Things to Remember

1. According to their size, plants are known as trees, shrubs, and herbs.
2. Trees are tall and erect and have a single stem.
3. Shrubs are smaller than trees. A shrub has several separate stems.
4. Herbs are low growing plants with soft stems.
5. Stems of trees and shrubs are woody; of herbs green.
6. According to their span of life, plants are of three kinds : perennials, biennials, and annuals.
7. Perennials live from year to year, biennials live for two years, and annuals for only one season.
8. All trees are perennials. Vegetable and cereal plants are annuals.

Things to Do

1. See the various trees, shrubs, and herbs in your school garden.
2. Examine the stems of a tree, a shrub, and a herb.

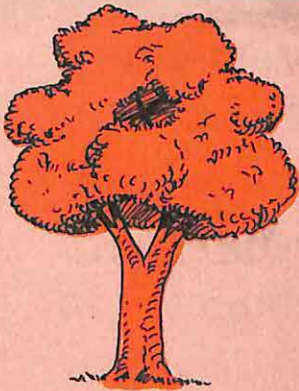
Things to Find Out

1. Which is the tallest plant in your neighbourhood ?
2. What are the various parts of a plant ?

Tick (✓) the Correct Word

1. A (tree/shrub) has several separate stems.
2. Carrot is a (herb/shrub).
3. A (herb/shrub) has woody stem.
4. (Palm/Neem) is a shady tree.
5. Rose is a (tree/shrub).....
6. Tomato is (an annual/a biennial).
7. Mango tree is (perennial/annual).

Below are the pictures of some plants. Name each plant as a tree, shrub or herb.



CHAPTER 14

KINDS OF ANIMALS

1. Many kinds of Animals

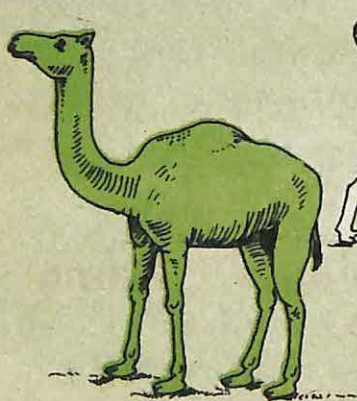
There are thousands of different kinds of animals on earth.

Some are big, like elephant, camel, and horse.

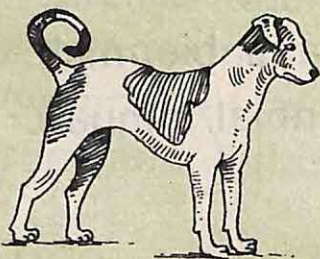
Some are not so big, like fox, dog, and monkey

Some are small like squirrel, rat, and lizard.

Some are very small, like ant, wasp and fly.



Camel



Dog



Squirrel



Wasp

Different animals move in different ways.

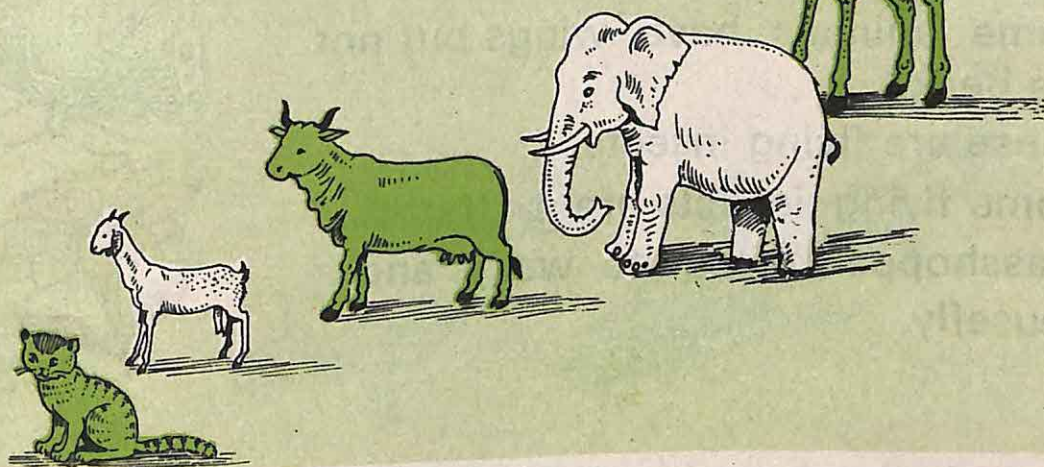
They live in different places.

They eat different kinds of food.

2. Animals that Walk

Many animals have four legs. Some of these are cow, goat, buffalo, sheep, dog, cat, horse, camel, elephant, etc.

These animals walk on land on their legs.



3. Animals that Fly

Some animals have wings.

With their wings, they fly in air.

Winged animals with hard beaks are called birds.

Crow, sparrow, parrot, and pigeon are some of the common birds.



Crow



Sparrow



Parrot

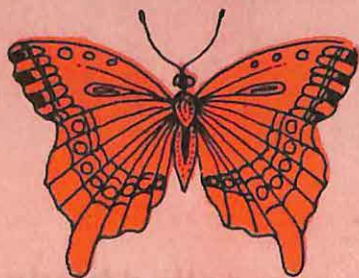


Pigeon

Some animals have wings but not the beak.

These are flying insects.

Some flying insects are butterfly, grasshopper, mosquito, wasp, and housefly.



Many insects do not have wings.
They walk on their legs.
Two such insects are
ant and cockroach.

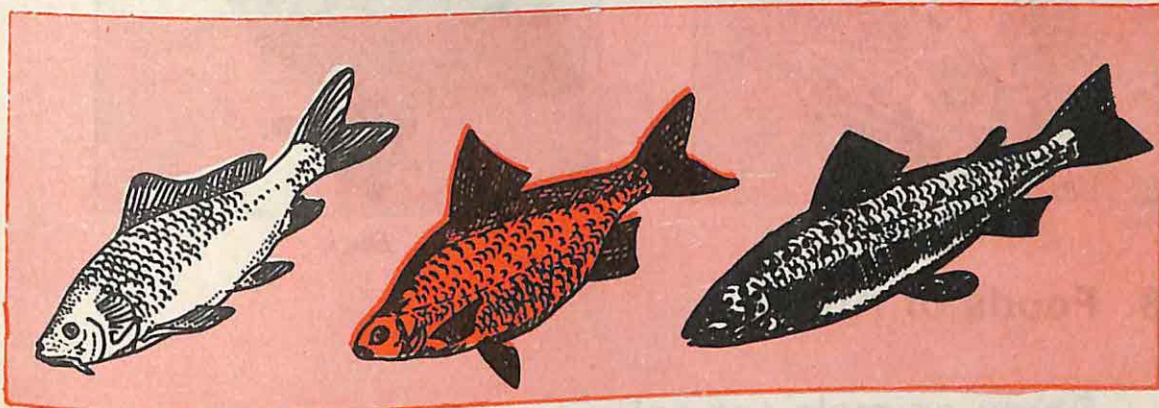


Ant

Cockroach

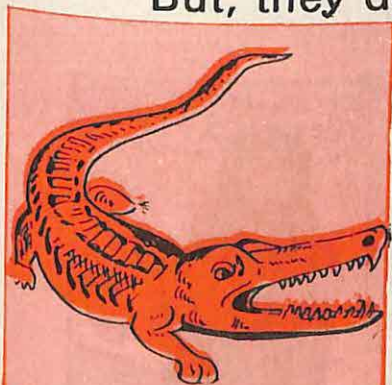
4. Animals that Live in Water.

Some animals live in water, like the fish.
Fish are of different kinds.
If a fish is taken out of water, it soon dies.



Three kinds of fish

Crocodile, tortoise, and snail also live in water.
But, they do not die out of water.



Crocodile



Tortoise



Snail

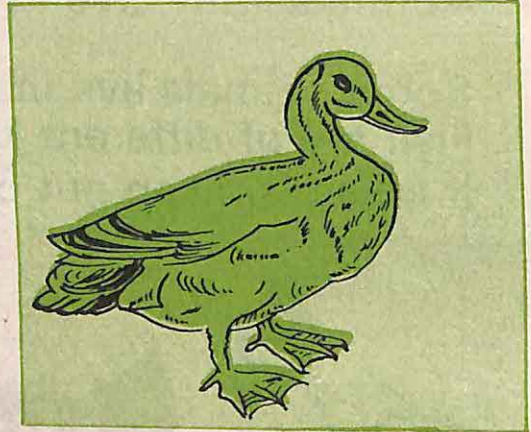
5. Animals that Live Both in Water and on Land

Frog and duck live both in water and on land.
On land, a frog moves in hops.

A duck walks clumsily on land, but swims with ease in water.



Frog

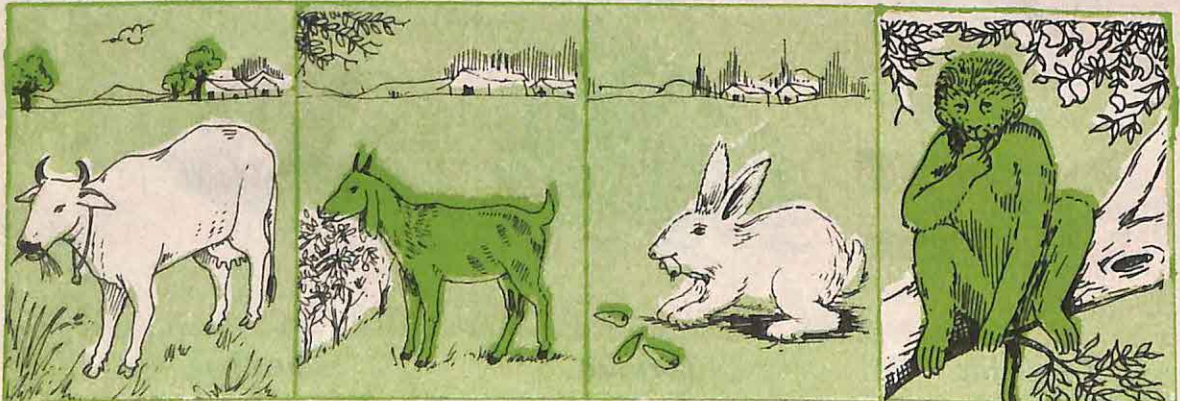


Duck

6. Foods of Animals

Some animals eat only grass and field plants.
Cow, sheep, goat, horse, donkey, rabbit, monkey, deer, etc. are animals of this type.

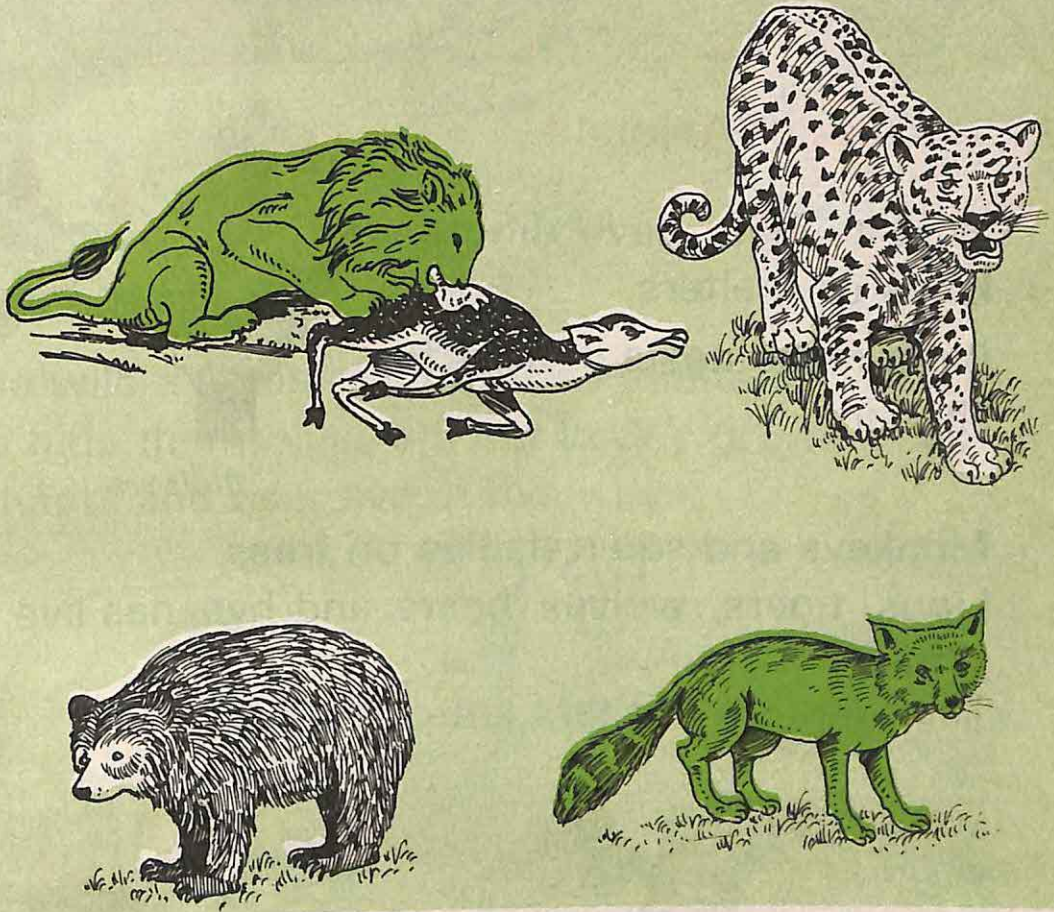
Plant-eating animals are very gentle.



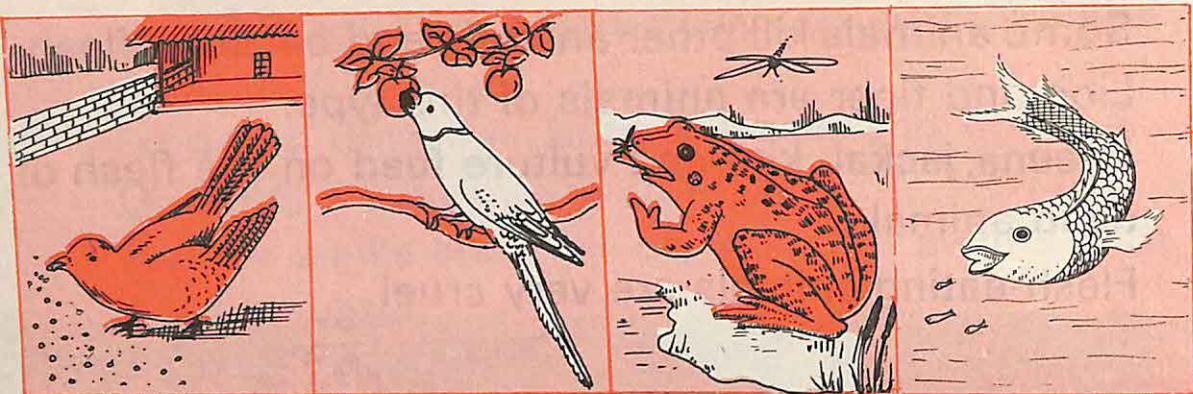
Some plant eating animals

Some animals kill other animals and eat their flesh.
Lion and tiger are animals of this type.
Hyaena, jackal, kite, and vulture feed on the flesh of
dead animals.

Flesh-eating animals are very cruel.



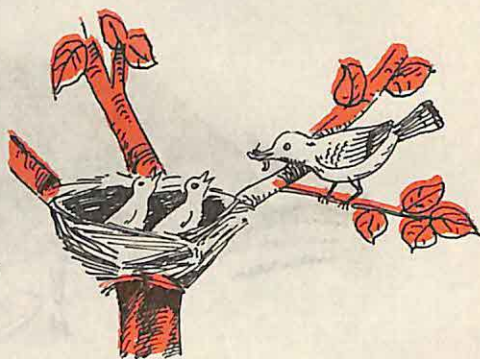
Some animals eat both plant and other animals.
Two such animals are man and the bear.
Most birds eat foodgrains and small worms.
Frogs and lizards eat insects
Fish eat water-plants and smaller fish.



7. Shelters of Animals

Wild animals have different kinds of shelters.

Birds make nests in trees for shelter.

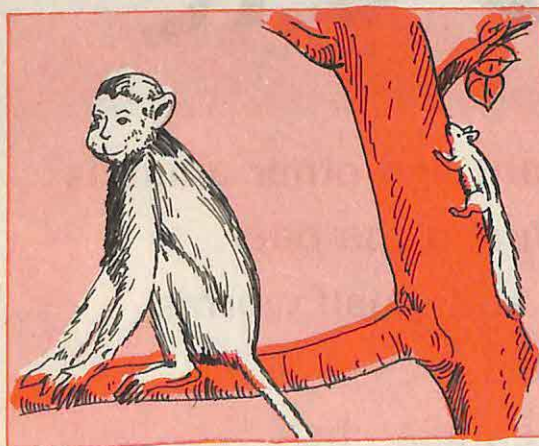


Bird's nest

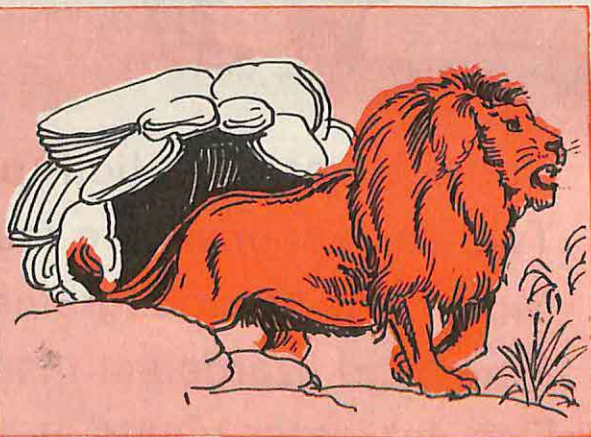
Monkeys and squirrels live on trees.

Lions, tigers, wolves, bears, and hyaenas live in caves.

Their natural shelters are called dens.



Monkey



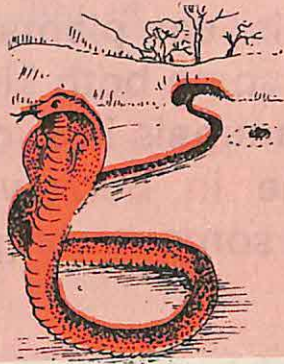
Lion's den

Foxes and rabbits make holes in the ground to live in. These holes are called burrows. Snakes live in holes made by other animals.

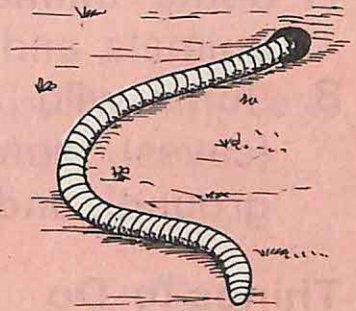
Ants and earthworms live in holes under the soil.



Rabbit's burrow

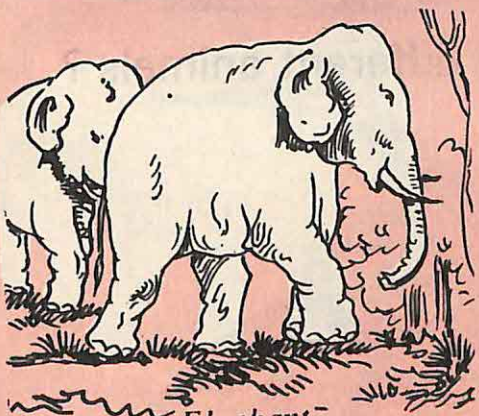


Cobra

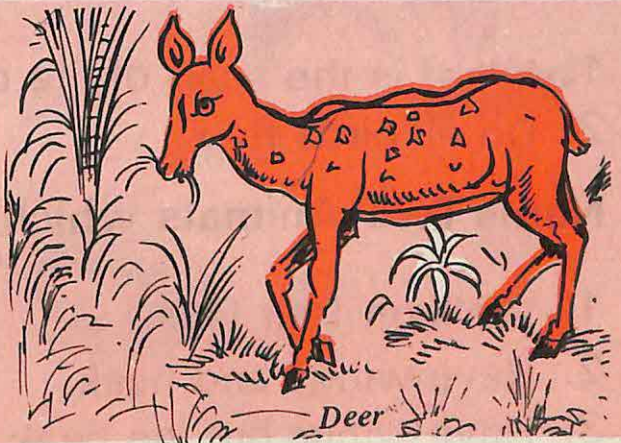


Earthworm

Some wild animals do not make shelters. They hide themselves among thickly grown trees. Elephants and deer live in this way.



Elephant



Deer

Things to Remember

1. Animals differ in size and shape.
2. Some animals walk on land.

3. Birds have wings and a beak. They fly in air.
4. Flying insects have wings but not a beak.
5. Fish, crocodile, tortoise, and snail live in water.
6. Frog and duck can live both in water and on land.
7. Some animals eat plants, some flesh of other animals, and some both kinds of food.
8. Some wild animals live in trees, some in dens (caves), some in burrows (holes dug in the ground), and some among thickly grown trees.

Things to Do

1. Watch a bird making its nest.
2. Collect feathers of different birds.

Things to Find Out

1. What is the span of life of different animals ?
2. Do all birds fly ?

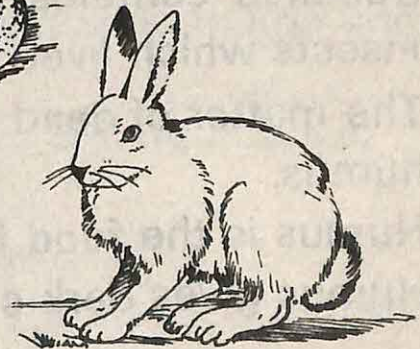
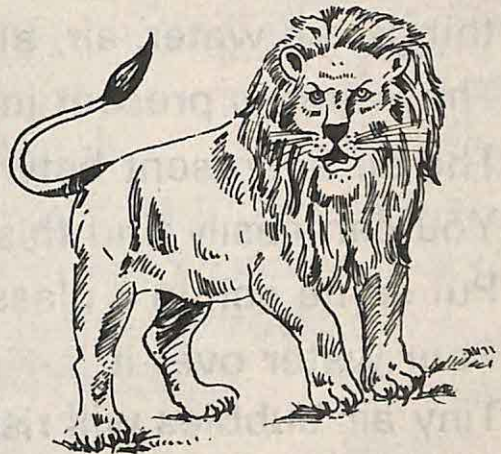
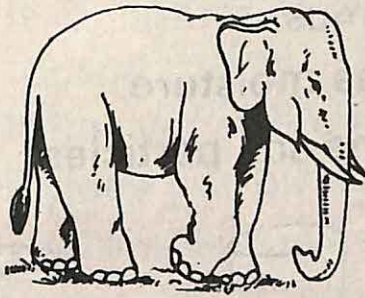
Name Two Animals which

1. Walk on four legs. 1 2
2. Have wings and beak. 1 2
3. Have wings but no beak. 1 2
4. Make burrows. 1 2
5. Live in caves. 1 2
6. Live in water. 1 2
7. Eat insects. 1 2

Fill in the Blanks

1. Monkeys live in
2. Lions live in
3. Foxes and rabbits live in
4. Snakes live in
(choose from these words : burrows, dens, trees, holes, nests)

Colour the following pictures :



CHAPTER 15

SOILS AND MINERALS

1. The Soil

Soil is the top layer of ground in which plants grow.

It consists of tiny particles of rocks.

But, the soil contains many other things. These things are water, air, and humus.

The water is present in soil as moisture.

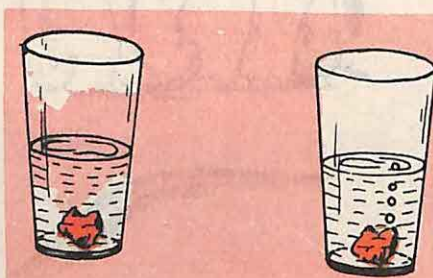
The air is present between the soil particles.

You can easily find this out.

Put some soil in a glass.

Pour water over it.

Tiny air bubbles will rise from the soil.



Soil also contains decayed plants, worms, and insects which lived in it.

The matter of dead plants and animals is called humus.

Humus is the food for plants growing in soil.

Humus gives dark colour to the soil.

2. Layers of Soil

Soil is not the same at various depths.

The upper layer of soil is dark in colour.

It contains much humus.

It is therefore good for the growth of plants.

This layer is called the topsoil.

Below the topsoil is subsoil.

It is lighter in colour than the topsoil.

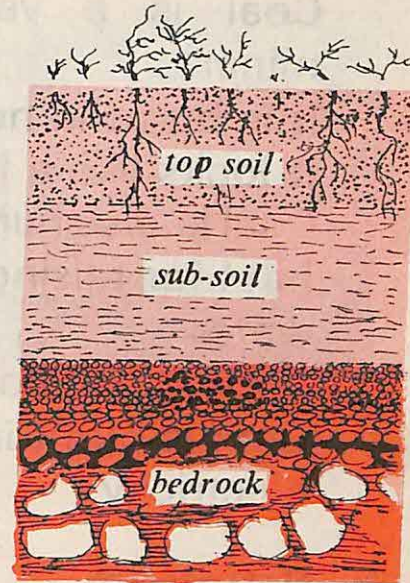
It has very little humus in it.

It does not provide much food to the plants.

There are small stones in the subsoil.

Underlying the subsoil is the bedrock.

It consists of stones and rocks.



Layers of Soil

3. Minerals

At places, there are many valuable things under the bedrock.

Man gets these things by drilling holes in the earth.

These holes are called mines.

Things dug out from mines are called minerals.

Some minerals are coal, petroleum, diamond, gold, iron, and other metals.

4. Coal

Coal is a very common mineral.

It is burnt in homes as fuel.

It looks like a black stone.

Coal is also burnt to produce heat for raising steam from water.

That is why coal is used in steam engines.

Coal is burnt in steam power plants to generate electricity.



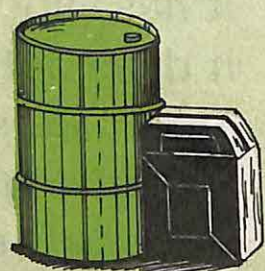
5. Petroleum

Petroleum is a dark, oily liquid.

It is also burnt as a fuel.

It is used to run motor-cars, aeroplanes, ships, etc.

Petroleum occurs deep inside the earth.



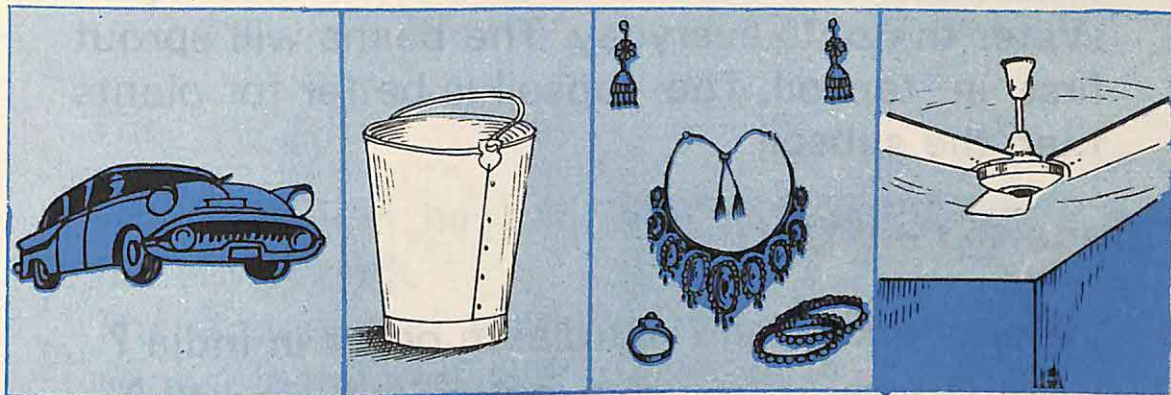
6. Metals

Coins, kitchen utensils, tools, etc. are all made of metals.

Some common metals are iron, copper, aluminium, silver, and gold.

Iron is a very useful metal. It is used in making things from a needle to a giant ship.

Gold and silver are used for making ornaments.



All these things are made of metals

All metals are dug from the earth.

Things to Remember

1. Soil is the top layer of ground.
2. Soil is made up of rock particles. It also contains water, air, and humus.
3. Humus is the decayed material of plants and animals. It serves as the food for plants.
4. The upper layer of soil is topsoil. It contains more humus than the lower layer called subsoil.
5. Valuable things dug out from the earth are called minerals. Coal, petroleum, and metals are all minerals.

Things to Do

1. Dig a hole at a suitable place in the ground. Remove topsoil and subsoil in separate heaps. Note the difference in their colour.

2. Fill a flower pot with topsoil. Fill another one with subsoil. Plant four beans in each pot. Water the pots everyday. The beans will sprout first in topsoil. The topsoil is better for plants than the subsoil.

Things to Find Out

1. Where do coal and petroleum occur in India ?
2. In what form is iron dug out from the earth ?

Tick (✓) the Correct Word

1. Decayed plants and animals in soil form (minerals/humus).....
2. Plants grow better in (topsoil/subsoil).....
3. Soil contains (air/coal).....
4. Ornaments are made from (iron/gold).....

Picture-reading

In the picture given below, tick (✓) those things which are made of metals.



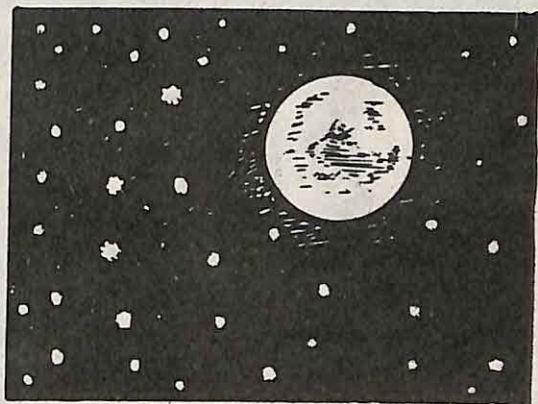
MOON AND STARS

1. The Sky After Sunset

After the sun has set, the sky is dark.

The moon and stars appear in the dark sky. The moon gives us light.

But its light is far less bright than sun's light.



2. The Moon Changes Shape

The moon changes its shape day to day.

Sometimes it is seen round and bright. Like a bright circle.

We call it **full moon**.

Then it goes on changing its shape.

After seven days, it appears as a half circle.

We call it **half moon**.

The size of the moon continues to decrease

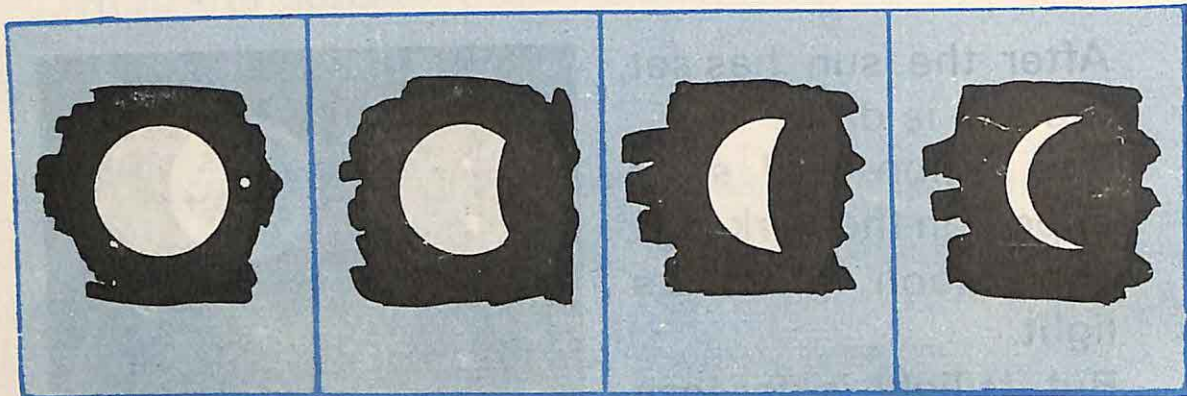
After another seven days, it is seen as a thin sickle.

We call it **new moon**.

The new moon then gradually increases in size.

In seven days, it is half moon once again.

In another seven days, it is again the full moon.



3. The Stars

There are countless stars in the sky.

Each star looks like a point of light.

In fact, stars are very big. As big as the sun.

Many stars are even much bigger and hotter than the sun !

Stars look so small because they are far away.

They are thousands of times farther away than the sun is from earth.

Little wonder that they appear as tiny points of light.

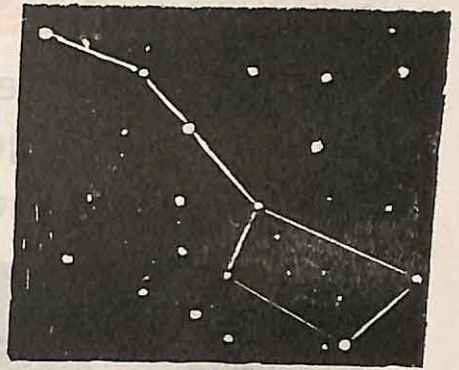
4. Groups of Stars

Stars are scattered all over the sky.

Among them, some stars stand out as separate groups.

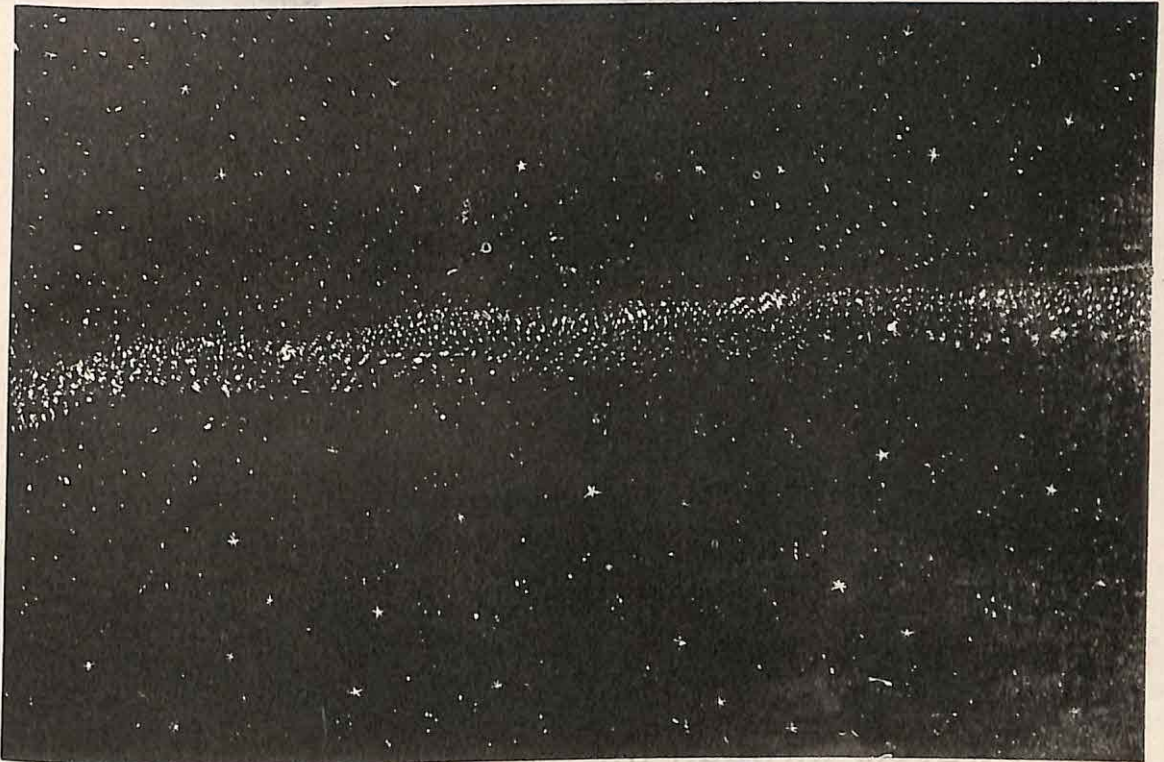
One such group of stars is the Big Dipper.

It is a group of seven stars. You can see it in the northern sky in summers.



5. The Milky Way

Right across the dark sky, there is a bright band. It looks like a silvery road in the sky. It is called the Milky Way.



The Milky Way consists of millions of faint stars.

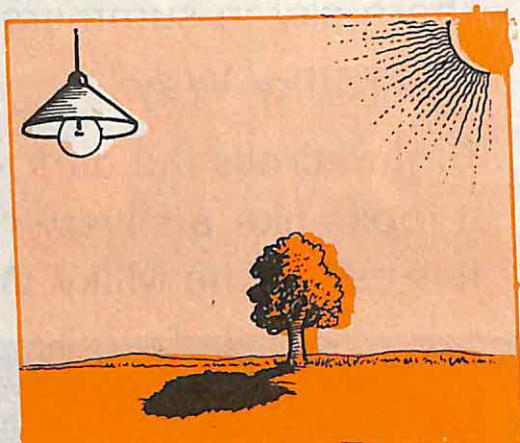
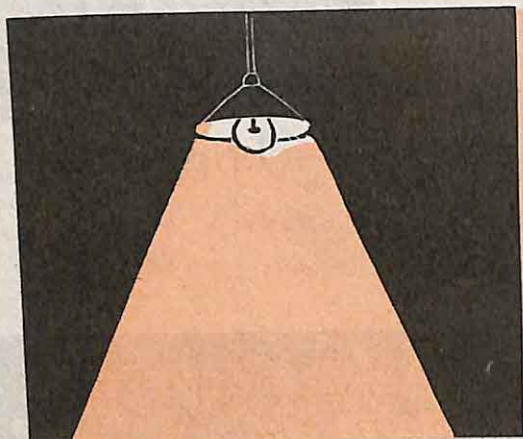
These stars are packed very closely. So, they are not seen separately.

6. Where Are the Stars in Day-time ?

The stars disappear as the day dawns.

Where do they go away ?

They are right there in the sky.



But, we cannot see them in the sky lit up by the sun. Like we do not see a bulb glowing in sunlight.

The same bulb is seen glowing brightly in darkness.

It is the same with the stars.

They show up in the dark sky. They cannot be seen in sunlight.

7. Transport in Sky

Man travels through the sky also.

The means of sky-travel are the aeroplanes, helicopters, jet planes, and rockets.

These are all very fast means of travel.

Aeroplanes are big enough to carry hundreds of men.

They run on a long runway before they can rise into the air.

A helicopter can rise straight up into the air.

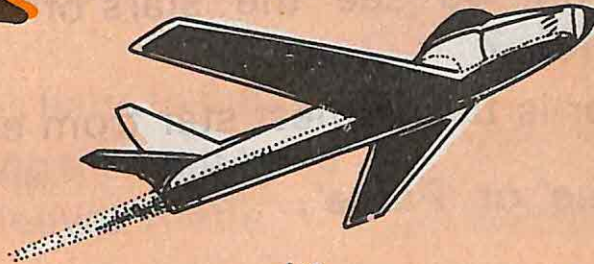
And, it can land straight down.

Thus, it can take off and land in a very small space.

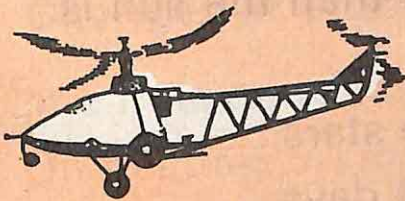
Jet planes and rockets fly at great speeds.



Aeroplane



Jet



Helicopter



Rocket

Things to Remember

1. The moon changes its shape day to day.
2. There are countless stars in the sky. Stars are nearly as large as or even larger than the sun.

3. Big Dipper is a group of seven stars.
4. Milky way consists of millions of stars close together.
5. Stars cannot be seen in a brightly lit sky.

Things to Do

1. Find the Big Dipper in the night sky.
2. Visit an aerodrome. See how aeroplanes take off and land.

Things to Find Out

1. How can we see the stars of the Milky Way separately ?
2. How far is the farthest star from earth ?

Write 'True' or 'False'.

1. Stars are closer to the earth than the sun is.
.....
2. Big Dipper is a group of five stars.....
3. A full moon appears after 28 days.....
4. The stars remain in the sky in daytime.....
5. The Milky Way is a band of moon-light.....

CHAPTER 17

CLOUDS AND RAIN

1. The Air

Air is all around us.

It has neither colour nor any shape.

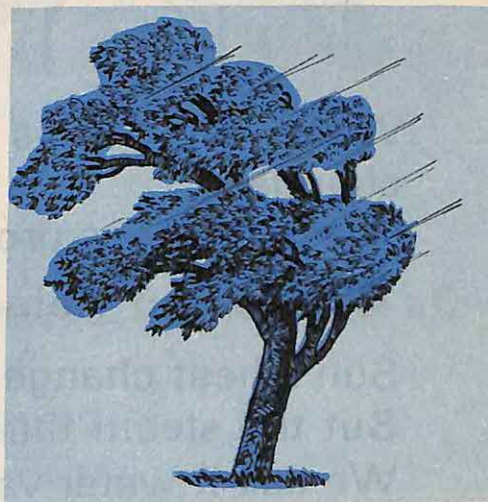
This is why we cannot see air.

We can only feel it when it moves fast.

Fast moving air is called wind.

Wind causes flags to flutter.

Wind blowing through trees makes the leaves rustle.



2. Changes in Water

In a freezer, water changes to ice.

On heating, water changes to steam.

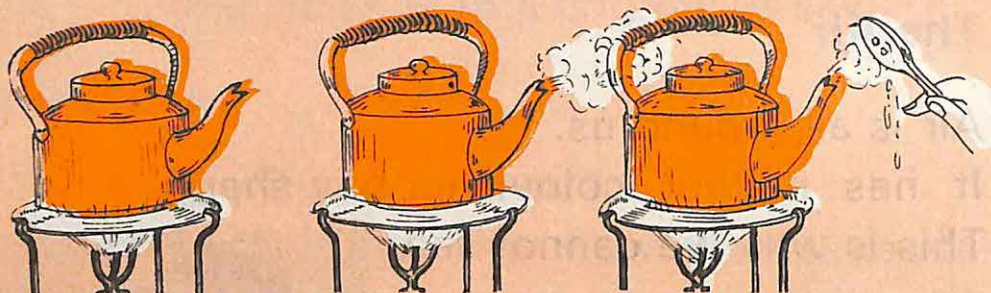
The steam mixes up with air and disappears.

If steam is cooled, it forms water back.

Find this out for yourself.

Heat some water in a kettle.

Soon, steam begins to issue from the spout.
Hold a big spoon against the steam.
Drops of water form as the steam cools.



Water on earth's surface undergoes similar changes.

These changes produce clouds, rain, hail, etc.

3. Clouds and Rain

Sun's heat changes water to steam.

But the steam thus produced is not water.

We call it water vapour. We cannot see it.

The change of water to water vapour is called evaporation.

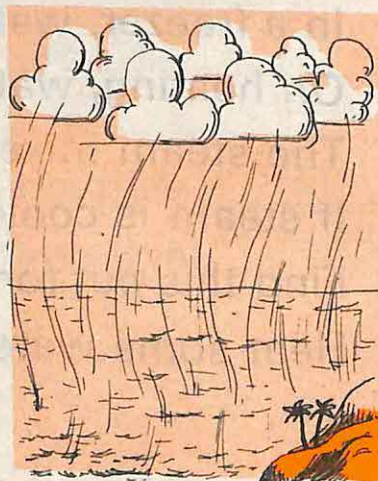
Water from earth's surface evaporates all the time.

From the ponds, lakes, rivers, and seas.

The water vapour mixes with the air.

High up in the air, the water vapour cools.

It changes into tiny drops of water.



Clouds

The clusters of water drops appear as clouds.

Sometimes the clouds are further cooled.

Then the water droplets come closer together.

They make bigger drops.

The clouds now become very dark.

The big drops of water in them fall down as rain.



4. Hail

Sometimes the air tosses rain-drops high up in the mid-air.

These are then intensely cooled.

They turn into tiny balls of ice.

The tiny ice balls are tossed up again and again.

Each time a new layer of ice deposits over them.

They grow bigger and bigger.

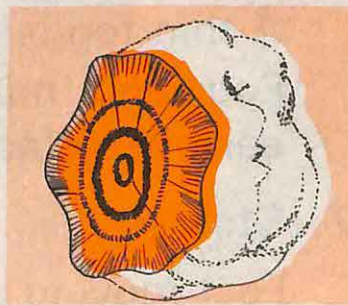
Finally, they fall down as pebbles of ice.

This frozen rain is called hail.

When it hails next, collect some hailstones.

Cut a big hailstone into two halves.

You will see many layers of frozen water.



A half cut hailstone

5. Dew

The water vapour in air appears in many other forms.

Some of these are dew, fog, and mist.

Dew appears as tiny drops of water on blades of grass and leaves of plants.

Dew is formed when water vapour cools down near the ground.

You can see dew early in the winter mornings.

Or, on clear days in rainy season. *Dew on grass-blades*

As the sun rises, the dew evaporates.



6. Fog and Mist

When it is very cold, the water vapour in air changes to water on dust particles floating in air.

This produces fog.

Things are not seen clearly through fog.

A thin fog is called mist.

Fog and mist form near the earth's surface.



Fog

7. Storms

Fast moving air is called wind.

A very strong wind is called a storm.

Storms are usually accompanied by thunder and lightning, rain, hail, etc.

Accordingly, these are called thunderstorm, rainstorm, hailstorm, etc.

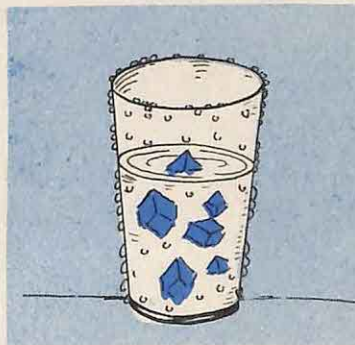


Things to Remember

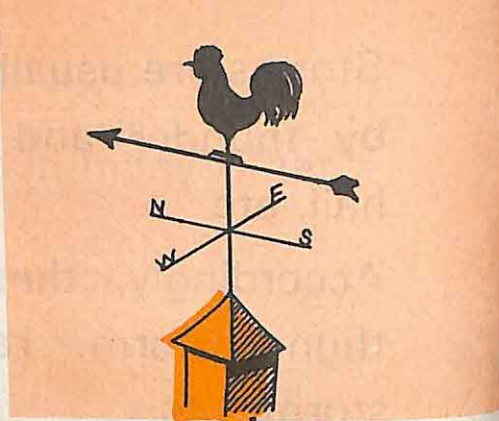
1. Air is all around us. Fast moving air is called wind. A strong wind is called storm.
2. Sun's heat changes water on earth's surface to water vapour. The water vapour mixes with air.
3. Clouds, rain, hail, dew, fog, and mist are forms of water vapour in air.
4. Hail is frozen rain.

Things to Do

1. Put some crushed ice in a glass. Wipe dry on the outside. Soon drops of water will appear on the outer surface of glass. These are formed by the cooling of water vapour in the air around the glass.



See a weather-cock mounted atop a building. Note that it moves in the direction of the wind.



Weather-cock

Things to Find Out

1. What is a wind-mill ?
2. Which place in India has the highest rainfall.

Tick (✓) the Correct Word

1. Clouds are clusters of (water vapour/ water droplets).
2. When water vapour changes to water on dust particles, (dew/ fog) is formed.
3. Frozen water makes (mist/ hail).
4. Water vapour is (visible/ invisible).

CHAPTER 18

WEATHER

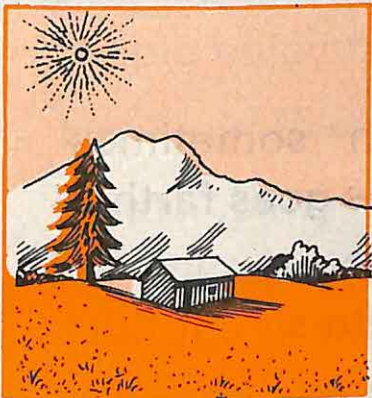
1. Conditions of Weather

Sometimes it rains too frequently.

At another time strong winds keep blowing.

Sometimes it is hot, sometimes cold.

The conditions of sunshine, air, and rain are called weather.

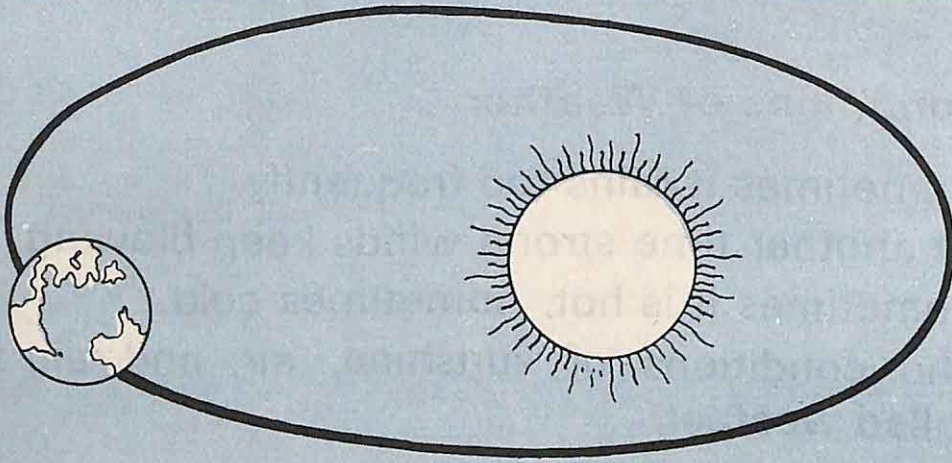


There are three main weathers : hot weather, rainy weather, and cold weather.
Weather affects our living.

2. Hot and Cold

The earth continuously spins like a top.
This causes day and night.

The earth also turns round the sun.
The path of earth round the sun is oval.



Earth moving round the sun

So, the same part of the earth sometimes comes closer to the sun, sometimes goes farther away.

When a part of earth is closer to sun, it gets more heat.

It is hot over there.

When it moves away from the sun, it gets less heat.

Then, it is cold over there.

3. The Hot Weather

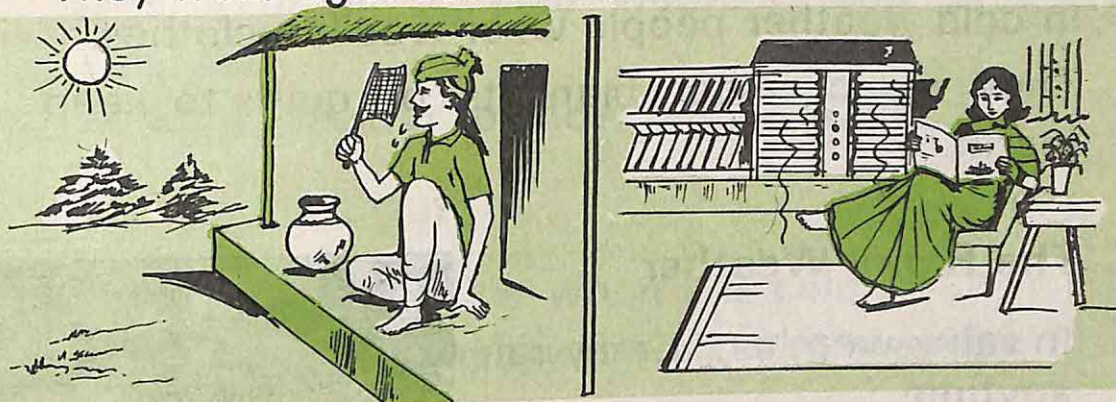
In hot weather the sun shines brightly.

It is uncomfortable in the open in daytime.

People like to keep indoors.

They use fans or coolers to lessen the heat.

They wear light cotton clothes.



They drink cold water every now and then.

People enjoy taking cold drinks.

4. The Cold Weather

Things change in cold weather.

Sunshine is now welcome.

Boys and girls like to play outdoors in daytime.

Inside the house people like to sit by fire-side.



People like to sit and work in the sun.

Cold drinks are not liked.

People like to have hot tea, hot coffee, etc.

In cold weather people wear woollen clothes.

They sleep under blankets or quilts to keep warm.

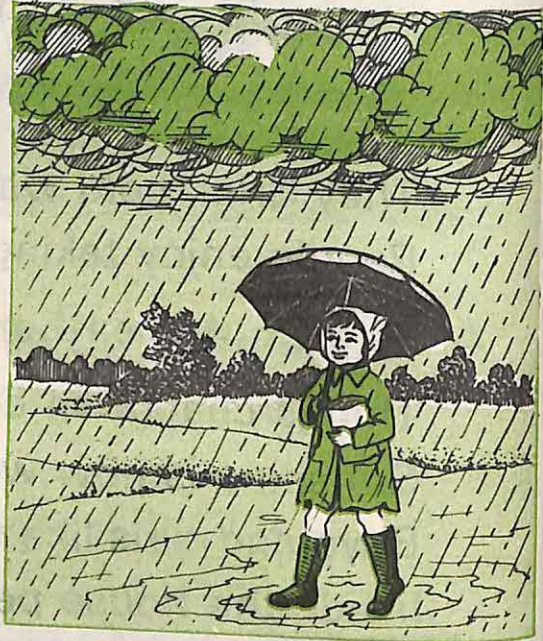
5. The Rainy Weather

In rainy weather, it may rain anytime.

It may be a light shower or a heavy downpour.

People use umbrellas or rain coats when it rains.

When the rain stops, it is quite pleasant.



Things to Remember

1. Conditions of sunshine, air, and rain cause different weathers.
2. Weathers affect our living.
3. The earth turns round the sun in an oval path. This causes conditions of hot and cold.

Things to Do

1. Make a list of fruits and vegetables available in hot weather, in cold weather, and in rainy weather.
2. Make a drawing to show rainy weather.

Things to Find Out

1. How do animals live when it is cold ?
2. Why do we feel sticky during rainy weather ?

Fill in the Blanks

1. In weather the sun shines brightly.
2. People like to sit by the fire-side in weather.
3. Umbrellas are used in weather.
4. People like to keep indoors in daytime in weather.

(Choose words from these : cold, rainy, hot.)

Name the Weather :

Below are the pictures of things used in different weathers. Write down under each picture the weather in which it is used :



CHAPTER 19

MAN SHAPES THE EARTH

1. The Early Man

Long ago, man did not live in houses as we do. He lived on trees or in caves.

He ate the animals he could kill.

He ate things raw.

Things slowly changed.



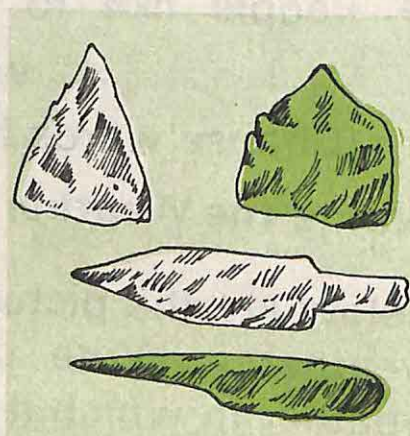
The Early Man

2. Man Makes Tools

A time came when man learnt to make tools.

The early tools were made of stone. With his tools man could easily kill animals and cut down plants.

He could even dig the earth.

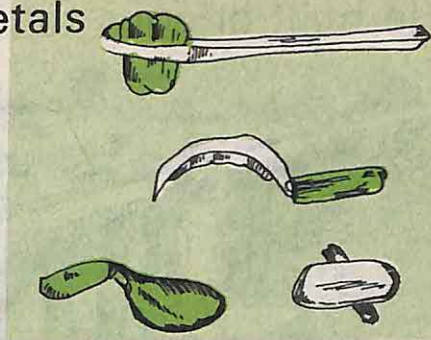


Stone tools

Then, man learnt to dig metals out of the earth.

With the metals he made still better tools.

He made axes, spades, knives, and doors.



Metal tools

3. Man Cultivates Land

Man used tools to cultivate land and grow his food.

This was the most important change that ever happened to man on earth.

It changed his way of life greatly.



Cultivation of land

4. Man Shapes the Earth

Man was now free from fear of hunger.

He now began to shape the earth.

He worked to make it a better place to live in.

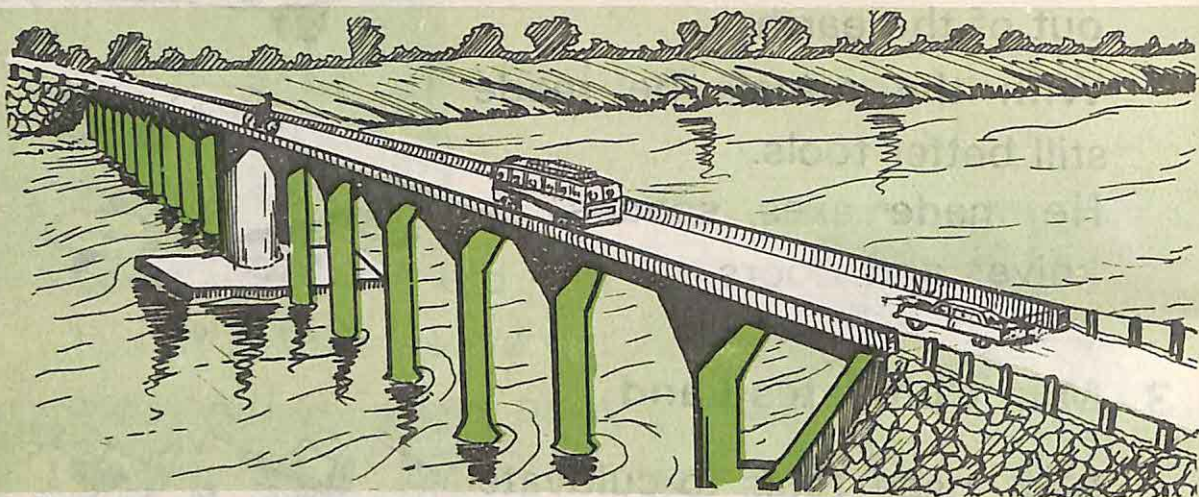
He built roads to connect places.

He built rails for faster movement.

He dug canals for carrying water to places that needed it.

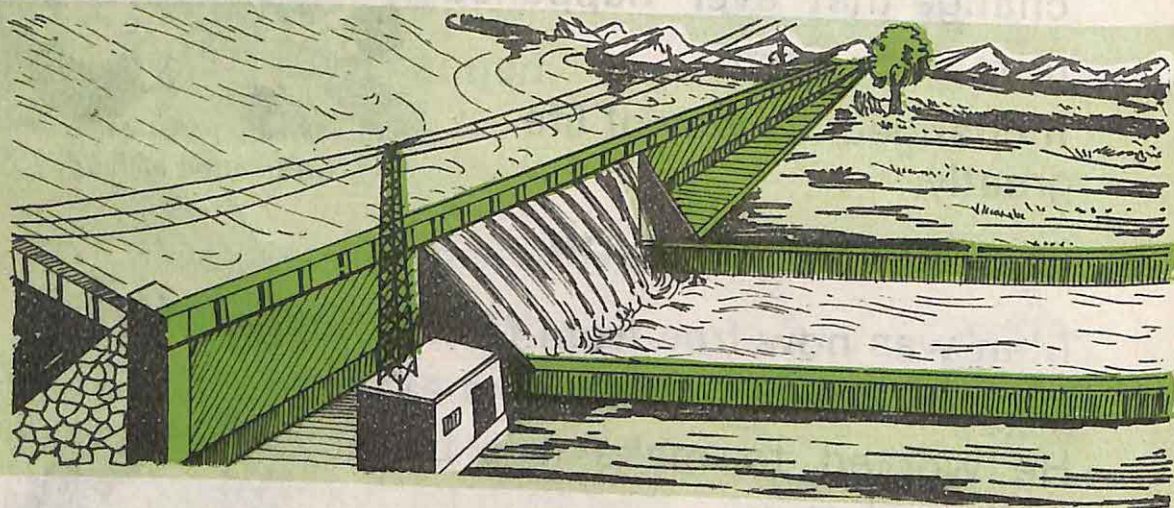


He built bridges to cross rivers.



A bridge

He built dams to keep back the water of a stream or river.



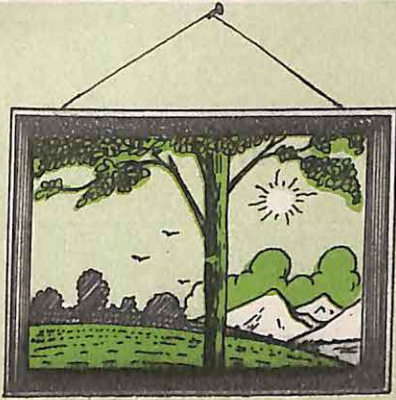
A dam

With these structures man has changed the face of the earth.

Life is now much easier, much comfortable.

5. Man Beautifies the Earth

Man has planted beautiful gardens.
He has constructed beautiful buildings.
He has created drawings and paintings of great beauty.
He has carved lovely statues out of stones.



A painting



A statue

He has developed delightful music and dances.
With all this he has beautified the earth.

Things to Remember

1. The life of early man was very hard.
2. Man first made tools of stone and then of metals.
3. With the help of tools man cultivated land.
4. Man has changed the face of the earth by building roads, bridges, canals, dams and rails.

5. Man has beautified earth with gardens, buildings, drawings, paintings, statues, music, dances, etc.

Things to Do

1. Make a collection of pictures of the life of the early man.
2. Visit a nearby bridge or a dam.

Things to Find Out

1. Visit a farm. Find out what tools are used by the farmer.
2. Find out why dams are built.

Fill in the Blanks

1. Man's first tools were made of
2. A is dug for carrying water to places that need it.
3. A is built to keep back the water of a river.
4. A is built to cross a river.

